**Protein Crystal**


## FIELD OF THE INVENTION

The present invention is in the fields of biotechnology, protein purification and crystallization, x-ray diffraction analysis, three-dimensional computer molecular modelling and rational drug design. The invention is directed to the liver X receptor b (LXRβ, NR1H2) and ligands for this receptor, and in particular to crystalline LXRβ and to methods of identifying ligands utilizing LXRβ, as well as to compounds, compositions and methods for selecting, making, and using therapeutic or diagnostic agents having LXRβ modulating or binding activity.


## BACKGROUND OF THE INVENTION

Liver X receptors are members of the superfamily of nuclear receptors. These transcription factors regulate target genes through a complex series of interactions with specific DNA response elements as well as transcriptional coregulators. The binding of ligand has profound effects on these interactions and has the potential to trigger both gene activation and, in some cases, gene silencing. There are about 50 sequence-related nuclear receptors in humans and the family comprises receptors that recognize hormones, both steroidal and non-steroidal, but also receptors responding to metabolic intermediates and to xenobiotics. There are also a number of so-called orphan receptors where the natural ligand is unknown. Some of the receptors show a very specific and high affinity ligand binding, like the thyroid hormone receptors, while others have a substantially lower affinity for their ligands and are also highly promiscuous in terms of ligand selectivity. Like many of the other non-steroid hormone receptors, LXR functions as a heterodimer with the 9-cis-retinoic acid receptor (RXR) to regulate gene expression . Together with PPARs and FXR LXRs represent a subclass of so called permissive RXR heterodimers. In this subclass, the RXR heterodimers can be activated independently by either the RXR ligand, the partner's ligand or synergistically by both .

LXRs consist of two closely related receptor isoforms encoded by separate genes – LXRα (NR1H3) and LXRβ (NR1H2). As expected, the largest sequence differences are located in the N-terminal domain and in the so-called hinge region connecting the DBD and the LBD. LXRα shows tissue restricted expression with the highest mRNA levels detected in the liver and to a lesser extent in the kidney, small intestine, spleen and adrenal gland . In contrast, LXRβ is ubiquitously expressed  Both LXR isoforms have been shown to be activated by specific oxysterols that can be formed *in vivo* . Recently potent, non-steroidal synthetic ligands have been described. T0901317 , GW3965  and F3MethylAA  all have binding IC50s around 10 nM.

Important insight into LXR biology has been obtained through the study of LXR deficient mice. Both LXRα and LXRβ knockout mice have been described. The LXRα null strain exhibits a striking inability to metabolize and excrete excess cholesterol when challenged with a high-cholesterol diet . The explanation appears to be an inability to up-regulate the rate-limiting enzyme in cholesterol conversion to bile acid, CYP7A, in response to the excess cholesterol. As a consequence, the conversion of cholesterol to bile-acid that would normally occur is blunted and cholesteryl esters deposit in the liver ultimately resulting in liver-failure. In contrast, the LXRβ knockout strain maintains its natural resistance to a high cholesterol diet  These important findings not only prove an important function of LXRα in rodent cholesterol metabolism, but also suggest that the LXR dependent regulation of CYP7A is LXR-subtype selective. The CYP7A LXR response element is not well conserved between rodents and man. LXRs are therefore not expected to be main regulators of cholesterol conversion to bile-acids in humans . This notion is supported by results from *in vitro* assays using cultured human cells . However, more recently, LXRs have been shown to regulate also several other genes involved in cholesterol and lipid homeostasis. Prominent examples are the phospholipid/ cholesteryl ester transporter ABCA1 , ABCG1  and the SREBP1c gene  that, in turn, induces fatty acid synthesizing enzymes. Increasing insight into the involvement of LXRs in cholesterol and fatty acid homeostasis has led to considerable interest in LXRs as targets for drug development. As an example, one hallmark of atherosclerosis is the build-up of cholesteryl esters in macrophages of the arterial wall, transforming the cells into so-called foam cells that, in turn are constituents of the atherosclerotic plaque. The potential to increase cholesterol

efflux from macrophages/foam cells by inducing genes such as ABCA1 and /or G1 thereby preventing or even reversing the atherosclerotic process make LXRs highly interesting drug targets.

The inventor's understanding of how nuclear receptor ligands exert their effects has been dramatically enhanced by the elucidation of the crystal structures of the apo or liganded LBDs of several nuclear receptors. These structures have revealed a common, mainly a helical, fold unique for LBDs of nuclear receptors. It comprises a core layer of three helices (H5/6, H9 and H10) sandwiched between two additional layers of helices (H1-4 and H7, H8, H11 respectively). This arrangement creates a wedge shaped molecular scaffold that contains a wider upper part, which shows the highest degree of sequence conservation a between the LBDs. The narrower lower part is folded to form a hydrophobic cavity into which the ligand can bind. The remaining secondary elements, an antiparallel b-sheet comprising 2-4 strands and H12 (sometimes also referred to as the AF-2 domain) sits on each side of the ligand-binding cavity. The structures have revealed that ligands can affect the position of H12 so that an agonist puts H12 in a position allowing coactivator binding and preventing corepressor binding, while in an unliganded or antagonist bound receptor the coactivator binding site is blocked. Alternatively, the unliganded or antagonist bound receptor recruits corepressors. The binding modes of several of these coregulators have also recently been depicted in detail.

The present inventors have been able to produce LXRβ crystals and to determine from that the three dimensional structure of the LXRβ ligand binding domain (LBD).

## SUMMARY OF THE INVENTION

The present invention refers to the crystallization of LXRβ and determination of its crystallographic co-ordinates. Therefore, in a first aspect the present invention provides a LXRβ ligand binding domain crystal.

In another aspect of the invention, methods for designing ligands which will bind to LXRβ are provided. Such methods use three-dimensional models based on the crystals of the

LXRb ligand-binding domain. Generally, such methods comprise, determining compounds which are likely to bind to the receptor based on their three dimensional shape in particular the ligand binding domain of the LXRb. Preferably, such compounds have a structure that is complementary to the ligand-binding cavity of the LXRb. Such methods comprise the steps of determining which amino acid or amino acids of the ligand-binding domain of the LXRβ interacts with the binding ligand, and selecting compounds or modifying existing compounds, to improve the interaction. Preferably, improvements in the interaction are manifested as increases in the binding affinity but may also include increases in receptor selectivity and/or modulation of efficacy.

Preferably, the ligands bind to the internal LXRβ binding cavity with a high binding affinity, for example within the range of 0.01–1000 nM.

The ligands may bind tightly to the LXRβ yet not up-regulate gene expression thereby inhibiting the action of endogenous LXRβ activators. Thus, the invention also provides a method of inhibiting the activity of endogenous LXRβ activators by providing ligands that bind to LXRβ with a high affinity, blocking the activity of the endogenous ligands. Alternatively, binding of the ligand to the LXRβ may cause conformational changes to the LXRβ inhibiting further binding thereto. The invention further provides a method of inhibiting the activity of endogenous LXRβ ligands in an animal, the method comprising administering to the animal a ligand which binds to at least the LBD, of the LXRβ with high affinity and blocks binding of further ligands to at least the LBD of the LXRβ. Such ligands are potentially useful in, for example, the treatment of LXRβ mediated diseases in humans. Preferably the ligands are identified by the method of designing ligands according to the invention.

## DETAILED DESCRIPTION OF THE INVENTION

One aspect of the invention provides a crystal comprising at least 150 amino acid residues of the LXRβ ligand-binding domain. Preferably, the said crystal comprises at least 200 amino acid residues of LXRβ. More preferably, said crystal contains at least 250 amino

acid residues of LXRβ. Most preferably, the said crystal comprises the entire LXRβ amino acid sequence.

Preferably the crystal comprises the amino acid sequence shown as Leu-220 to Asp-458 most preferably Leu-220 to Glu-461 of a LXRβ ligand binding domain as shown in Figure 5 or an amino acid sequence having at least 95%, especially above 97, 98 or 99% identity to the sequence. This numbering is based on the full sequence of human LXRβ. Preferably, the crystal comprises the entire amino acid sequence shown in Figure 5.

Isolated protein consisting of the amino acid sequence listed for the crystals are also provided by the invention. The isolated protein may be used to produce the crystals.

The proposed structural identity (based on analogy to the estrogen receptor and thyroid hormone receptor) of parts of the LXRβ ligand-binding domain is shown below, based on the amino acid numbering of the full LXRβ.

| Secondary motif | LXRβ residues |
| --- | --- |
| Helix-1 | Thr-221 to Val-249 |
| Helix-3 | Ala-261 to Val-289 |
| Helix-4 | Gly-291 to Gln-294 |
| Helix 5 | Gly-296 to Thr-308 |
| Helix 6 | Thr-308 to Arg-319 |
| Sheet-1 | Tyr-320 to His-322 |
| Sheet-2 | Glu-325 to Phe-329 |
| Sheet-3 | Phe-333 to Ser-336 |
| Helix-7 | Ser-336 to Ala-343 |
| Helix-8 | Gln-346 to Gly-364 |
| Helix-9 | Asp-366 to Ser-380 |
| Helix-10 | Pro-389 to Ile-409 |
| Helix-11 | Asp-414 to Gln-445 |
| Helix-12 | Pro-450 to Ile-456 |

An embodiment of this aspect of the invention provides a crystal produced using a sequence including helix 12 of LXRβ. Preferably this is between Pro450 to Ile-456.

The crystals according to the invention may be usable in X-ray crystallography.

In another embodiment of the present invention there is provided a LXRβ crystal as described above also including a ligand bound to LXRβ or a portion thereof. Said ligand may be selected from T0901317 (N-(2,2,2-trifluoroethyl)-N-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]-benzenesulfonamide, CAS # [293754-55-9]; WO 00/54759), G-W-3965 (3-(3-(2-chloro-3-trifluoromethylbenzyl-2,2-diphenylethylamino)propoxy)phenylacetic acid, CAS # [405911-09-3]; Collins, Jon L.; et al. *J. Med. Chem.* (2002), 45(10), 1963-1966), 24(S),25-epoxycholesterol (CAS # [77058-74-3]), N-[1-(2-furanyl)ethyl]-N-4-pyridinyl-tricyclo[3.3.1.13,7]decane-1-carboxamide (CAS # [355833-66-8], WO-01/60818) or any other ligand that binds with reasonably affinity (<1000 nM) to the internal LXRβ binding cavity. The T0901317, G-W-3965 or any other ligand may be used with a coactivator ligand such as T1F2 NR-box 1.
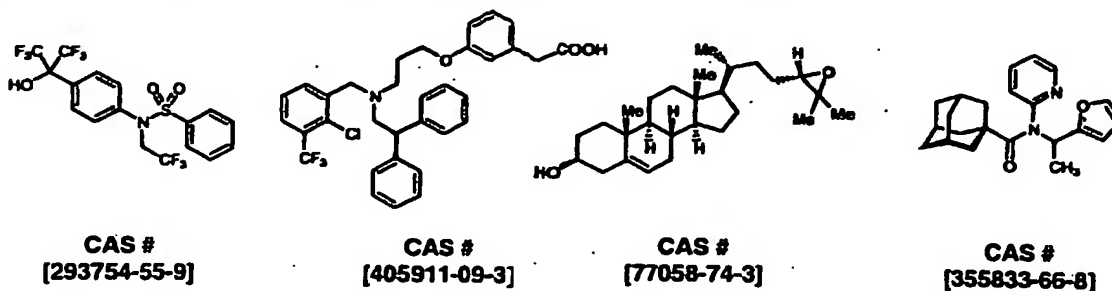


**CAS #**  **CAS #**  **CAS #**  **CAS #**
**[293754-55-9]**  **[405911-09-3]**  **[77058-74-3]**  **[355833-66-8]**

In another embodiment of the present invention there is provided a crystal of LXRβ LBD belonging to the space group P2₁2₁2₁ and having the unit cell dimensions a = 59 +/-3 Å, b = 100 +/-5 Å, c = 176 +/-3 Å, a = b = g = 90°.

In another embodiment of the present invention there is provided a crystal of LXRβ LBD belonging to the space group P6₁22 and having the unit cell dimensions a=59 +/-3 Å b= 59+/-3 Å c=294 +/-3 Å , a = b = 90°, g=120°.

In another embodiment of the present invention there is provided a crystal of LXRβ LDB in complex with a coactivator peptide (such as a peptide corresponding to the first NR-box

of TIF2 (Leers, Treuter et al 1998)) belonging to the space group $P2_12_12$ and having the unit cell dimensions a= 89+/-3, b= 91+/-3, c=131+/-3, a = b = g = 90°.

The crystals according to the invention may have a resolution as determined by X-ray crystallography of less than 3.6Å, preferably less than 2.9Å.

In another aspect of the present invention, there is provided a machine-readable data storage medium, comprising a data storage material encoded with machine readable data which, when using a machine programmed with instructions for using said data, is capable of displaying a graphical three-dimensional representation of a crystal structure as described above or a homologue of said crystal structure. Homologues include crystals with the same space group, but with another ligand, crystals with the same space group and substantially the same dimensions, and crystals using LXRβ from other species.

In yet another aspect of the present invention, there is provided a method for designing a potential LXRβ ligand for the treatment of diseases modulated by the LXRβ, the method comprising the steps of:

> (a) employing computational means to perform a fitting operation between the chemical entity and a binding site of LXRβ identified from a machine-readable storage medium as described above; and

> (b) analyzing the results of the fitting operation to predict the association between the potential chemical entity and the binding site.

Preferably the method also comprises the steps of:

> (c) synthesizing the potential LXRβ ligand based on the crystal structure of the LXRβ; and

> (d) assaying the LXRβ ligand for LXRβ binding, response in a LXRβ reporter cell line, measuring one or more in vivo effects including but not limited to lesion area of fatty streaks in the aortic root, lipoprotein profile and serum triglyceride levels.

The method may alternatively provide the steps of:

> synthesising the potential LXRβ ligand based on the crystal structure of said
> receptor; and
>
> assaying the LXRβ ligand binding response in a LXRβ reporter cell line by
> measuring one or more *in vitro* effects, including but not limited to changes in the
> activity of a LXR response element driven reporter gene such as alkaline
> phosphatase, green fluorescent protein, or luciferase, changes indicating that the
> LXRβ ligand may be used for treatment of diseases modulated by LXRβ.

The LXR response element may be provided within, for example, a suitable plasmid
containing the response element, reporter gene and suitable termination sequences. The
reporter gene will be arranged so that expression of it is under the control of the response
element.

Suitable vectors include, but are not limited to, bacterial or eukaryotic vectors such as
plasmids or cosmids, phage vectors such as lambda phage, viral vectors such as adenoviral
vectors or baculoviral vectors, and other vectors known in the art.

The vector preferably comprises suitable regulatory sequences to allow the nucleic acid
molecule of the invention to be expressed in a suitable host cell to produce protein encoded
by the nucleic acid molecule. Typically, the vector comprises a suitable promoter and
terminator sequences, or other sequences such as poly A sequences, operably linked to the
nucleic acid molecule. Such regulatory sequences are well known in the art.

The vector may also comprise a gene to allow the vector to be selected within a cell, such
as an antibiotic resistance gene or a nutritional gene. Such genes are well known in the art.

The reporter gene is preferably Green Fluorescent Protein (GFP), which is known in the
art. This fluoresces and enables the position of the kinase to be identified.

A further reporter system which may be used is *lacZ* gene from *E.coli*. This encodes the
β-galactosidase enzyme. This catalyses the hydrolysis of b-galactoside sugars such as

lactose. The enzymatic activity in cell extracts can be assayed with various specialised substrates, for example X-gal, which allow enzyme activity quantitation using a spectrophotometer, fluorometer or a luminometer.

Alternatively, the reporter gene may be secreted alkaline phosphatase. This is a secreted enzyme which may be assayed from a supernatent by methods known in the art.

Luciferase, another known reporter gene, may be used. This is derived from the firefly (*Photinus pyralis*). It catalyses a reaction using D-luciferin and ATP in the presence of oxygen and $Mg^{2+}$ to produce light emission. The amount of light produced, and hence the amount of reporter gene produced under the control of the reporter element, may then be quantified.

The inventors have also identified that helix-12 of LXRβ plays a key role in determining the efficacy (agonism v. antagonism) of a ligand.

Accordingly, preferably the method includes the step of modifying the potential LXRβ ligand so that it:

(a)     sterically displaces helix-12;  or

(b)     disrupts the dimerisation surface.

The dimerisation interface has been identified as helices H10 and H11.

In yet another aspect of the present invention, there is provided a method of designing a ligand which will bind to LXRβ comprising comparing the shape of a compound with the shape of the ligand binding cavity of LXRβ as obtained from a crystal according to the invention, and determining which amino acid or amino acids of the ligand binding domain interact with said compound.

In yet another aspect of the present invention, there is provided a crystallized molecule or molecular complex comprising a binding pocket defined by the structure coordinates of human LXRβ ligand binding domain amino acid residues 200 or a homologue of said

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molecule or molecular complex wherein said homologue has a root mean square deviation form the backbone atoms of said amino acids of not more than 1.5 Å.

In a preferred embodiment of this aspect there is provided a crystallized molecule or molecular complex comprising a binding pocket defined by the structure coordinates of human LXRβ ligand binding domain amino acid residues Ser242, Phe268, Phe271, Thr272, Leu274, Ala275, Ser278, Ile309, Met312, Leu313, Glu315, Thr316, Arg319, Ile327, Phe329, Leu330, Tyr335, Phe340, Leu345, Phe349, Ile350, Ile353, Phe354, His435, Gln438, Val439, Leu442, Leu449, Leu453, Trp457 or a homologue of said molecule or molecular complex wherein said homologue has a root mean square deviation form the backbone atoms of said amino acids of not more than 1.5 Å.

A further aspect of the invention provides crystallisable compositions comprising at least 250 amino acid residues of the LXRβ ligand-binding domain.

A further aspect of the invention provides a method of using the crystal of the invention in a drug screening assay comprising:

     (a)     selecting a potential ligand by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modelling;

     (b)     contacting (i.e. docking) the potential ligand with the ligand binding domain of LXRβ; and

     (c)     detecting the binding of potential ligand for the ligand binding domain

Preferably, a potential drug is selected on the basis of it having a greater affinity for the ligand domain of LXRβ than that of a standard ligand for the ligand binding domain of LXRβ. Alternatively, potential drugs may be selected by looking for those from a number of potential drugs with the greatest binding affinity.

Preferably the standard ligand in step (c) is T0901317, GW3965, or 24(S),25-epoxycholesterol.

The method may further comprise:

(d)     growing a supplemental crystal containing a protein ligand complex formed
between the N-terminal truncated LXRβ and the potential drug, wherein the crystal
effectively diffracts X-rays for the determination of the atomic coordinates of the
protein-ligand complex to a resolution of greater than 5.0 Å;

(e)     determining the three-dimensional structure of the supplemental crystal with
molecular replacement analysis;

(f)     selecting a candidate drug by performing a rational drug design with the
three-dimensional structure determined for the supplemental crystal, wherein said
selecting is performed in conjunction with computer modelling;

(g)     contacting a cell that expresses LXRβ; and

(h)     detecting a measure of protein synthesis in the cell; wherein a candidate
drug is identified as a drug when it inhibits or enhances the expression of protein
synthesis in the cell.


The method preferably comprises an initial step that precedes steps (a) wherein initial step
consists of determining the three-dimensional structure of a crystal comprising a
protein-ligand complex formed between an N-terminal truncated LXRβ and T0901317,
GW3965, or 24(S),25-epoxycholesterol, wherein the crystal effectively diffracts X-rays for
the determination of the atomic coordinates of the protein-ligand complex to a resolution of
greater than 5.0 Å.


The invention also provides a method of using a crystal of the invention in a drug screening
assay comprising:

(a)     selecting a potential ligand by performing rational drug design with the
three-dimensional structure determined for the crystal, wherein said selecting is
performed in conjunction with computer modelling;

(b)     adding the potential ligand to a cDNA or protein expression assay regulated
by LXRβ;

(c)     detecting a measure of a cDNA or protein expression; wherein a potential
ligand that regulates the expression of protein expression is selected as a potential
drug.

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Such cDNA or protein expression assays are themselves known *per se* in the art.
Preferably the assay is *in vitro*.

Computers for producing a 3D representation are also provided, the representation being of:

(a)     a molecule or molecular complex, wherein said molecule or molecular
complex comprises a binding pocket defined by the structure coordinates of LXRβ
amino acid residues Ser242, Phe268, Phe271, Thr272, Leu274, Ala275, Ser278,
Ile309, Met312, Leu313, Glu315, Thr316, Arg319, Ile327, Phe329, Leu330,
Tyr335, Phe340, Leu345, Phe349, Ile350, Ile353, Phe354, His435, Gln438, Val439,
Leu442, Leu449, Leu453, Trp457 according to the co-ordinate tables; or

(b)     a homolog of said molecule or molecular complex, wherein said homolog
comprises a binding pocket that has a root mean square deviation from the
backbone atoms of said amino acids of not more than 1.5 Å, wherein said
computer comprises:

(i)     a computer-readable data storage medium comprising a data storage
material encoded with computer-readable data, wherein said data comprises the
structure of LXRβ amino acid residues Ser242, Phe268, Phe271, Thr272, Leu274,
Ala275, Ser278, Ile309, Met312, Leu313, Glu315, Thr316, Arg319, Ile327,
Phe329, Leu330, Tyr335, Phe340, Leu345, Phe349, Ile350, Ile353, Phe354,
His435, Gln438, Val439, Leu442, Leu449, Leu453, Trp457 according to any one of
the co-ordinate tables;

(ii)     a working memory of storing instructions for processing said
computer-readable data;

(iii)     a central-processing unit coupled to said working memory and to
said computer-readable data storage medium for processing and computer-machine
readable data into said three-dimensional representation; and

(iv)     a display coupled to said central-processing unit for displaying said
three-dimensional representation.

Preferably the computer produces a 3D representation of:

(a)     a molecule or molecular complex defined by structure coordinates of all of the LXRβ ligand binding domain amino acid residues set forth in the co-ordinate tables; or

(b)     a homolog of said molecule or molecular complex, wherein said homolog comprises a binding pocket that has a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5 Å; and wherein said computer readable data contains the coordinates of all of the LXRβ ligand binding domain amino acid residues as set forth in any one of the co-ordinate tables.

The invention also provides methods for determining the 3D structure of a complex between LXRβ and a ligand, therefore, which comprises:

(a)     obtaining x-ray diffraction data for crystals of the complex; and

(b)     utilizing a set of atomic coordinates a portion thereof according to the invention; and coordinates having a root mean square deviation therefrom with respect to conserved protein backbone atoms of not more than 1.5Å to define the three-dimensional structure of the complex.

A still further aspect of the invention provides a method for determining a modelling structure of a protein containing LXRβ or a complex of said protein and a ligand, which method comprises:

(a)     providing a three-dimensional structure defined by a set of coordinates or a portion thereof according to the invention; and coordinates having a root mean square deviation therefrom with respect to conserved protein backbone atoms of not more than 1.5Å;

(b)     generating a three-dimensional model structure of the protein containing LXRβ using a homology modelling method and the structure of step (a) as a template; and

(c)     subjecting the resulting model to molecular mechanics energy minimization.

The term "rational drug design", as used herein, is defined as the designing of drugs for specific purposes, such as the binding to a predetermined receptor or the treatment of a predetermined disease. Examples include the designing of a drug to specifically bind

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and/or modulate nuclear hormone receptor binding, and the design of drugs to prevent or treat atherosclerosis. This is based upon the knowledge of molecular properties such as binding modes and interaction of the drug to its receptor as revealed by x-ray crystallography; the contribution of various functional groups contained in the drug to the affinity and specificity of the binding of the drug to its target; molecular geometry and electronic structure of drug and its target; and an information catalogued on analogous drug molecules. Such drug design is usually based on computed-assisted modelling and does not usually include pharmacokimetics, dosage analysis or drug administration analysis.

Computer modelling is the theoretical representation of data that simulates the behaviour or activity of systems, processes or phenomena. This includes the use of mathematical equations, computers and other electrical equipment. In the context of drug design, computer modelling allows the simulation of the strength of interaction between a drug conclictal and its target receptor.

Isolated proteins consisting essentially of the LBD of LXRβ, vectors encoding such proteins and host cells are also provided. the isolated protein may be attached to a tag, such as a his-tag.

Drug candidates are potential drugs. That is, they include compounds which have initial indications that they will have potential clinical use or activity.

The term "supplemental crystal" refers to a second, additional, crystal complexed with a further, different LXRβ ligand.

The term "standard ligand" refers to a known, characterised, ligand.

## STRUCTURE BASED DESIGN OF LXR LIGANDS

The present invention elucidates the structure of the ligand-binding cavity of LXRβ. Knowledge of the structure of this cavity has utility in the design of structurally novel

LXRβ ligands and in the design of non-obvious analogues of known LXRβ ligands with improved properties. These enhanced properties include one or more of the following: (1) higher affinity, (2) improved selectivity for LXRβ vs. related nuclear hormone receptors and/or (3) a designed degree of efficacy (agonism vs. partial agonism vs. antagonism). Without knowledge of the LXRβ structure, modifications to produce ligands with enhanced properties and a reasonable likelihood of success would not be available to those skilled in the art. The LXRβ structure also has utility in the discovery of new, structurally novel classes of LXRβ ligands. Electronic screening of large, structurally diverse compound libraries such as the Available Chemical Directory (ACD) will identify new structural classes of LXRβ ligands which will bind to the 3-dimensional structure of the LXRβ. Additionally the LXRβ structure allows for "reverse–engineering" or "*de novo* design" of compounds to bind to LXRβ.

## (1)    Enhanced Affinity

The present invention has revealed the size and shape of the interior binding cavity for representative LXRβ ligands T0901317 and GW-3965. The sizes and shapes of the cavities were delineated using the PASS program ("Fast Prediction and Visualization of Protein Binding Pockets With PASS"; G.P. Brady, Jr. and P.F.W. Stouten; J. Comp.-Aided Mol. Design, 14: 383-401, 2000). The interior binding cavity of LXRβ/T0901317 complex is shown in **Figure 6** (left) and has the dimensions of 13.1 x 9.2 x 7.5 Å along the first, second, and third principle moments of inertia respectively. The interior binding cavity of LXRβ/GW-3965 complex is shown in **Figure 6** (right) and has the dimensions of 17.0 x 11.9 x 8.0 Å along the first, second, and third principle moments of inertia respectively. In addition, this structure reveals a narrow "water-channel" adjacent to the cavity occupied by T0901317 and GW-3965.

Ligands which occupy as much of the interior binding cavities including the unoccupied "water-channels" as revealed by the LXRβ/T0901317 and LXRβ/GW-3965 complexes without sterically colliding with the receptor will provide ligands with higher affinity than either T0901317 or GW-3965.

The present invention has also revealed the presence of a histidine residue (His-435) which forms a very strong hydrogen bond with the acidic hydroxyl group of the ligand TO901317 [Ne – OC(CF$_3$)$_2$Ar) distance = 2.6 Å]. In addition, the sulfonyl oxygen atom of ligand TO901317 forms a weak hydrogen bond to the Ser-278 (Og – O=S=O distance = 4.1 Å). New ligands which preserve the strong hydrogen bond by an appropriately placed acidic hydrogen atom to interact with the Ne atom of His-435 and in addition place a hydrogen bond donating group closer to the Og atom of Ser-278 will show enhanced affinity for LXRβ relative to TO901317.

The present invention also reveals that there are a number of unsatisfied hydrogen bond partners in the ligand binding cavity (see **Figure 7**). These include the backbone carbonyl group of Phe-271 and the sidechain Og atoms of Thr-272 and Thr-316. Introduction of appropriately positioned hydrogen bond donating substituents on the ligand which form strong hydrogen bonds to one or more of these three hydrogen bond accepting groups in the receptor binding cavity will serve to enhance affinity.

The ligands produced in accordance with the invention bind more effectively to the LXRβ than TO901317. The ligand may bind with twice the binding affinity of TO901317, preferably three times the affinity, and most preferably ten or more times the affinity.

Preferably, the ligand produced in accordance with the invention occupies as much of the interior binding cavities of LXRβ as revealed by the LXRβ/TO901317 and LXRβ/GW-3965 complexes without perturbing the remainder of the LXRβ structure.

Preferably, the ligand produced in accordance with the invention also forms a hydrogen bond with the Ne atom of His-435 and at least one additional hydrogen bond to either Phe-271 (backbone carbonyl group), Thr-272 (Og), Ser-278 (Og), or Thr-316 (Og) of LXRβ without perturbing the remainder of the LXRβ structure.

(2)     **Improved Selectivity**

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The LXRβ receptor is very closely related to the LXRα and relatively closely related to the RXR, PXR, FXR, PPAR receptors. The RXR, PXR, FXR, PPAR receptors differ significantly in their primary sequence and slightly in their tertiary structure. As a consequence of these receptor differences, ligands may bind with different affinity to these four receptors.

The closest amino acid difference between LXRα and LXRβ in the vicinity of the bound ligand is Ala-294(a)/Thr-308(b). This is in turn next to Met-298(a)/312(b) which directly lines the binding cavity. Rotation about the $c_3$ sidechain of to Met-298(a) is more facile in LXRα than in LXRβ due to the presence of the smaller Ala-294(a) residue. Therefore subsituents from the ligand which push on Met-298(a) will afford ligand that are selective for LXRα over LXRβ.

Furthermore, a detailed understanding of the different receptors enables the different behaviour of a compound in different tissues to be understood, for example the selective liver X receptor modulators (SLXRMs) on the tissue in which it is active. LXRα and LXRβ have different tissue distributions and therefore ligands which display LXR isoform binding selectivity will also display tissue selectivity.

The present invention provides new ligands which exploit these differences by positioning ligand substituents in close proximity to one or more amino acid residue that differ between LXRβ and RXR, PXR, FXR, PPAR.

The ligands produced in accordance with the invention bind more effectively to the LXRβ receptor than to the RXR, PXR, FXR, or PPAR receptor. The selectivity of the binding to the LXRβ receptor may be tenfold, more preferably one hundred-fold, and most preferably greater than one thousand-fold.

(3)     **Modulation of Efficacy**

This invention provides an understanding of the differences between LXRβ agonist and antagonist binding and therefore a means to design LXRβ ligands with the desired degree

of efficacy. An examination of the differences between the ERa/estradiol (agonist; PDB accession code: 1ERE) and ERb/raloxifene (agonist; PDB accession code: 1ERR) complexes reveals a large movement in Helix-12. H12 adopts an "agonistic" conformation defined by the structure of the ERa/estradiol complex and an "antagonistic" conformation defined by the structure of the ERb/raloxifene complex. These two conformations are in thermodynamic equilibrium. When the ER is complexed with a full agonist, such as estradiol, the equilibrium lies far in the direction of the "agonistic" conformation. In contrast, while when complexed with an antagonist, the equilibrium is pushed in the direction of the "antagonistic" conformation. In the case of raloxifene ER ligand, the bulky side-chain collides with H12 in its agonistic conformation, thereby driving the equilibrium in the antagonistic direction. By introduction of progressively shorter side chains in raloxifene, the equilibrium will be gradually shifted back towards the agonist conformation. By analogy, replacement of one of the fluorine atoms of the hexafluoroisopropanol group of TO901317 will sterically collide with H12 in LXRβ. Thus, this invention provides a means of developing ligands with the desired degree of efficacy (agonist, partial agonist, or antagonist).

In particular, the importance of H12 has been determined as playing a central role in determining the efficacy (agonism vs. antagonism) of a ligand. Thus, ligands which are able to bind to and/or alter the conformation of H12 are of particular importance when designing a ligand or assessing the binding of a ligand, for the LXRβ receptor.

Additionally, it has been found that at least the majority of such receptor proteins when activated by binding to an agonist ligand are in the form a dimer (Khorasanizadeh S, Rastinejad F. 2001). Such dimerization leads to a potential route for disruption. Disruptions of this type can be used to predict antagonism or to produce antagonists. Disruptions may take the form of ligand binding which alters the conformation of the helices that comprise the dimerization interface or direct binding to the dimerization interface which then inhibits dimerization.

Further, the orientation of the ligand may be keyed to the receptor, in the dimeric or monomeric form. Furthermore, using the crystals of the present invention, the influence of

ligand binding to the LDB on the receptor conformation can now be shown to have influences on the behaviour of the receptor since it may disrupt the binding of co-activator, co-repressor, or heat-shock proteins. Previously, such predictions could not me made.


PRODUCTION OF LIVER X RECEPTOR b CRYSTALS AND THEIR APPLICATION


The present inventors have been able to isolate, differentiate and produce crystals for the liver X receptor b.


The crystal may be produced from a sequence comprising at least 250 amino acids, and preferably at least 200 amino acids of LXRβ. More preferably, the sequence comprises at least a portion of the ligand-binding domain of LXRβ. Alternatively, the sequence comprises the whole ligand-binding domain of LXRβ.


Advantageously, the crystals have a resolution determined by X-ray crystallography of less than 3.6 Å and most preferably less than 2.9 Å.


The production of such crystals has enabled the three dimensional structure of the ligand binding domain of LXRβ to be mapped. Use of such crystals in conjunction with the map enables a better understanding of how T0901317, GW3965 and other ligands bind to LXRβ with precision. This technique can also enable the design of receptor selective LXRβ agonists and antagonists since now the precise differences in the binding sites between LXRβ and the closely related LXRα.


Crystals of the LXRβ ligand-binding domain can be used as models in methods for the design of synthetic compounds intended to bind to the receptor. Such models show why very slight differences in chemical moieties of a ligand potentially have widely varying binding affinities. Hence, the three dimensional structure of the ligand binding domain can be used as a pharmaceutical model for compounds which bind to Liver X receptors.


Embodiments of the invention will now be described in more detail, by way of example, with reference to the accompanying drawing.

## FIGURE LEGENDS

**Figure 1.** Cartoon view of the LXRβ receptor with labeled helices.

**Figure 2** shows representative portions of a 2.4Å resolution SigmaA weighted 2
**Fobs-Fcalc** map where **Fobs** are the observed and **Fcalc** are the calculated structure-factor
amplitutes and 2**Fobs-Fcalc** is the difference Fourier synthesis electron density map in
which model error is reduced and electron density at the chosen contour (mesh diagram)
approximates the molecular surface for the LXRβ/GW3965 complex. The structure of
GW3965 (tube diagram) is fitted to the experimental electron density (mesh diagram).

**Figure 3.** Superposition of the LXRβ/T0901317 (carbons black) and the LXRβ/GW3965
(carbons light grey) complexes reveal dramatic changes in the ligand-binding pocket.

**Figure 4.** Residues that are within hydrogen bond distance or van der Waals (4.2 Å)
distance to the ligand are labeled. Dashed lines indicate hydrogen bonds and lines indicate
Van der Waals interactions. These interactions are shown in (a) for the LXRβ/T0901317
complex, and in (b) for the LXRβ/GW3965.

**Figure 5(a).**   Full length natural sequence of human LXRβ.
**Figure 5(b).**   The crystallized protein sequence with the first four non-LXRβ residues
gshm and the remaining 213-416 originating from human LXRβ.

**Figure 6.** Interior binding cavity of the LXRβ/T0901317 complex (left) and
LXRβ/GW-3965 (right). The Ca-trace of the protein is represented by solid line. The
structure of the ligand T0901317 and GW-3965 ligands are represented by a ball-and-stick
diagram. The binding cavity is represented by a transparent surface which is filled by
PASS probe spheres (dots).

**Figure 7.** Unsatisfied hydrogen bonding partners (backbone carbonyl groups of Phe-266, Phe-271, Met-312 and side-chain hydroxyl groups of Thr-272, Thr-316) as revealed by the LXRβ/T0901317 complex. Structure of T0901317 is represented by a capped sticks figure surrounded by the interior binding cavity of the receptor (transparent surface). Key amino acid residues are represented by labeled capped-stick. Hydrogen bonding accepting sites on the surface of the receptor binding cavity are represented by solid surfaces.

**DNA construction work**

The human LXRβ sequence is publicly available with accession number P55055 (SwissProt.) (Shinar, D.M. et al. (1994)). A construct spanning Gly213-Glu461 with the addition of an N-terminal 6xHis tag was used in the present work. The His-tag was designed to be cleavable using thrombin.

**Protein production**

The protein was expressed in *Escherichia coli* BL21 Star™ (DE3) cells (Invitrogen) using the pET28a expression system. Fermentation was carried out in batch culture (2xLB medium, 22°C) and expression of the recombinant protein was induced by the addition of 0.55mM IPTG (isopropyl-ß-D-thiogalactoside) at $OD_{600}$=5.0. After 4h of induction the cells were harvested by centrifugation. The cell pellet was resuspended and washed once with buffer (20 mM HEPES pH 8.0, 100 mM KCl, 10% glycerol and 2.5 mM monothioglycerol). Final cell pellet was frozen at –70°C.

40g cells were lysed by glass beadbeater (BioSpec Products, Inc.) in extract buffer containing 50 mM Tris, pH8.8, 250 mM NaCl, 10% glycerol and 1 mM PMSF. Soluble protein extract were collected by centrifugation at11000 rpm, 20 min in Sorvall RC-5B centrifuge (Du Pont-instrument AB), GSA rotor.

**Protein purification**

Crude LXRβ was eluted from 25 ml Talon by 20 mM Tris, pH8.0, 100 mM imidazole. Further purification was achieved using anion-exchange chromatography (5 ml Hitrap Q FF ion exchange column, Amersham Bioscience), and applying a gradient from 0 to 250

mM NaCl, pH8.0, eluted LXRβ. After thrombin cleavage, the final LXRβ (6-7 mg) fraction was obtained by running 4% acryl amide native gel electrophoresis in Tris-Epps buffer system.


## Protein quality analysis


To elucidate the homogeneity of LXRβ, throughout the purification samples were collected and run on SDS and native PAGE gels (Phast, Amersham Biosciences, Sweden). Reverse phase HPLC runs were performed on a Waters HPLC system (Waters, USA) at denaturing conditions. Typically, 100 ml sample was acidified by addition of 10% acidic acid (final concentration). A sample was injected and eluted in a 25-75% acetonitrile-water gradient in 0.1% triflouroacidic acid at 1 ml/min. The method proved to be very useful to reveal problems with ligand binding and LXRβ stability and for determine the concentration and LXRβ-ligand ratio.


## Crystallization and data collection


Crystallization was carried out using the hanging drop vapour-diffusion technique. Both LXRβ-GW9365 and LXRβ-T0901317 crystals were grown from buffer containing 8.5% iso-propanol, 17% PEG 4000, 85 mM HEPES, pH7.5, and 15% Glycerol at room temperature. The first LXRβ/T0901317 crystals formed in the P6122 space group, with a=b=58.7,c=293.8 and diffracted to better than 3 Å. In the same drops another crystal form was later detected belonging to the P212121 space group. Before data collection, crystals were flash-frozen in the 100 K nitrogen gas stream of an Oxford cryostream700. Data was either collected with an MAR345 image plate detector using X-rays from a Rigaku H3R rotating anode generator + Osmic Confocal Max-Fluxä optics or with a ADSC Q4R CCD at Experimental Station ID14-4 at ESRF. The observed reflections where reduced, merged and scaled with MOSFLM, and Scala in the CCP4 package.


## Structure determination and refinement

The structure was determined by molecular replacement methods with the CCP4 AmoRe program (Acta. Cryst. D50 (1994), pages 760-763), using an LXRβ homology model based on a thyroid hormone receptorb structures (Protein Databank Accession Code 1NAX).  A publicly available structure such as 1bsx.pdb, from the Protein Data Bank, could also have been used to create the model.  The molecular replacement was done on the first 3 Å data of LXRβ/T0901317 crystallized in P6122 and revealed one monomer per asymmetric unit. The crystal packing along one of the 2-folds revealed that the protein formed a tight homodimer, which allowed us to use the homodimer to search the second crystal form P212121 that gave 2 homodimers in the asymmetric unit. Electron densities for the T0901317 ligand confirmed the solutions of the molecular replacement. Model building was done with O and refinement initially with CNX and later with the CCP4 Refmac program and manual rebuilding. The four monomer complexes where treated as single TLS groups in Refmac which gave more interpretable electron density maps and improved the R-factors substantially.

**Table 1**. Summary of data collection, processing and refinement.

| Complex | LxRβ/T0901317 | LxRβ/GW3965 |
|---|---|---|
| Data collection | | |
| Source | In house | ID14 EH4 ESRF |
| Space group | P212121 | P212121 |
| Unit cell parameters | | |
| a | 58.7 | 58.7 |
| b | 103.3 | 98.9 |
| c | 176.0 | 175.8 |
| Resolution | 2.8 Å (2.8-2.95Å) | 2.4 (2.4-2.53) |
| Observations | | |
| Unique | 27153 | 37733 |
| Total | 92460 | 1129438 |
| Completeness (%) | 99.9 (99.7) | 98.5(95.4) |
| $<I>$ / $<s(I)>$ | 7.6 (1.9) | 8.8(3.5) |
| Rsym % | 8.4 (40.2) | 5.0(21.8) |
| Refinement | | |
| Rwork | 19.5 (27.9) | 20.7(21.8) |
| Rfree | 26.2 (34.8) | 26.3(29.6) |
| Number of atoms | 7782 | 7673 |
| R.m.s deviation | | |
| Bonds (Å) | 0.016 | 0.016 |
| Angles (°) | 1.49 | 1.36 |
| Average B-factor (Å²) | 24.3 | 23.1 |

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REMARK
TITLE   HUMAN LXR BETA HORMONE RECEPTOR /
TITLE  2 KB043546/WAY207380/GW3965 COMPLEX
REMARK
REMARK
REMARK  ATOMIC COORDINATES OF A CRYSTAL STRUCTURE
REMARK
REMARK  DEPOSITOR: MATHIAS FARNEGARDH
(MATHIAS.FARNEGARDH@KAROBIO.SE)
REMARK  DEPOSITION DATE 5-SEP-2002
REMARK
REMARK  THIS FILE REPLACE lxrb_KB43546_b1.pdb (11-MAR 2002)
REMARK
REMARK  THE ATOMIC COORDINATES AND/OR STRUCTURE FACTORS IN THIS FILE ARE THE
REMARK  EXPERIMENTAL RESULTS OF:
REMARK
REMARK  MATHIAS FARNEGARDH, KARO BIO AB
REMARK  NOVUM, 141 57 HUDDINGE, SWEDEN
REMARK
REMARK  THIS ENTRY CONTAINS THE COMPLETE CONTENT OF THE ASYMETRIC UNIT
REMARK  THAT COULD BE BUILT INTO INTERPRETABLE ELECTRON DENSITIES
REMARK  IT CONTAINS 4 INDEPENDENTLY REFINED PROTEIN MONOMERS
REMARK  CHAIN A 220-242, 247-253, 259-460 (HIS460 MODELLED AS ALA)
REMARK  A500 IS THE LIGAND
REMARK  CHAIN B 220-460 (HIS460 MODELLED AS ALA) B500 IS THE LIGAND
REMARK  CHAIN C 220-252, 264-438 THERE ARE WEAK DENSITIES SUGGESTING A LOW
REMARK  OCCUPANCY OF THE LIGAND. EXPERIMENTS TO ESTIMATE THE OCCUPANCY
REMARK  SUGGESTS AN OCCUPANCY AROUND 0.5-0.6. THERE ARE ALSO SOME WEAK BUT
REMARK  UNINTERPRETABLE DENSITY IN THE REGION WHERE H12 SITS IN THE A B AND
REMARK  D CHAINS.

REMARK  CHAIN D 220-244, 248-254, 263-444, 448-460 (HIS460 MODELLED AS
ALA)
REMARK  D500 IS THE LIGAND
REMARK  THE PROTEIN CRYSTALLIZED CONTAIN RESIDUES 213-461, THE
GAPS IN THE
REMARK  STRUCTURE ARE DUE TO UNINTERPRETABLE
ELECTRONDENSITIES IN THESE
REMARK  PARTICUALR REGIONS
HEADER    LXRB+KB043546/WAY207380/GW3965          05-SEP-02  XXXX
COMPND    MOL_ID: 1;
COMPND   2 MOLECULE: LIVER X RECEPTOR BETA;
COMPND   3 CHAIN: A, B, C, D;
COMPND   4 FRAGMENT: LIGAND BINDING DOMAIN;
COMPND   5 SYNONYM: LXRB;
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3  PROGRAM    : REFMAC 5.1.19
REMARK   3  AUTHORS    : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3   REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3 DATA USED IN REFINEMENT.
REMARK   3  RESOLUTION RANGE HIGH (ANGSTROMS) :  2.40
REMARK   3  RESOLUTION RANGE LOW  (ANGSTROMS) : 87.71
REMARK   3  DATA CUTOFF        (SIGMA(F)) : NONE
REMARK   3  COMPLETENESS FOR RANGE      (%) : 98.41
REMARK   3  NUMBER OF REFLECTIONS       : 38254
REMARK   3
REMARK   3 FIT TO DATA USED IN REFINEMENT.
REMARK   3  CROSS-VALIDATION METHOD       : THROUGHOUT
REMARK   3  FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3  R VALUE    (WORKING + TEST SET) : 0.20934
REMARK   3  R VALUE        (WORKING SET) : 0.20655
REMARK   3  FREE R VALUE            : 0.26237
REMARK   3  FREE R VALUE TEST SET SIZE  (%) : 5.0
REMARK   3  FREE R VALUE TEST SET COUNT    : 2021
REMARK   3
REMARK   3 FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3  TOTAL NUMBER OF BINS USED       :  20
REMARK   3  BIN RESOLUTION RANGE HIGH      :  2.400
REMARK   3  BIN RESOLUTION RANGE LOW       :  2.462
REMARK   3  REFLECTION IN BIN   (WORKING SET) :  2689
REMARK   3  BIN R VALUE        (WORKING SET) :  0.218
REMARK   3  BIN FREE R VALUE SET COUNT      :  140
REMARK   3  BIN FREE R VALUE          :  0.296
REMARK   3
REMARK   3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3  ALL ATOMS          :   7673

REMARK  3
REMARK  3 B VALUES.
REMARK  3  FROM WILSON PLOT        (A**2) : NULL
REMARK  3  MEAN B VALUE     (OVERALL, A**2) : 23.076
REMARK  3  OVERALL ANISOTROPIC B VALUE.
REMARK  3  B11 (A**2) :  -0.75
REMARK  3  B22 (A**2) :   1.03
REMARK  3  B33 (A**2) :  -0.28
REMARK  3  B12 (A**2) :   0.00
REMARK  3  B13 (A**2) :   0.00
REMARK  3  B23 (A**2) :   0.00
REMARK  3
REMARK  3 ESTIMATED OVERALL COORDINATE ERROR.
REMARK  3  ESU BASED ON R VALUE           (A):  0.511
REMARK  3  ESU BASED ON FREE R VALUE        (A):  0.288
REMARK  3  ESU BASED ON MAXIMUM LIKELIHOOD      (A):  0.208
REMARK  3  ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2): 8.796
REMARK  3
REMARK  3 CORRELATION COEFFICIENTS.
REMARK  3  CORRELATION COEFFICIENT FO-FC    :  0.939
REMARK  3  CORRELATION COEFFICIENT FO-FC FREE :  0.901
REMARK  3
REMARK  3 RMS DEVIATIONS FROM IDEAL VALUES      COUNT   RMS   WEIGHT
REMARK  3  BOND LENGTHS REFINED ATOMS     (A): 7652 ; 0.016 ; 0.022
REMARK  3  BOND LENGTHS OTHERS        (A): 7154 ; 0.003 ; 0.020
REMARK  3  BOND ANGLES REFINED ATOMS  (DEGREES): 10342 ; 1.363 ; 1.979
REMARK  3  BOND ANGLES OTHERS      (DEGREES): 16577 ; 0.924 ; 3.000
REMARK  3  TORSION ANGLES, PERIOD 1   (DEGREES):  898 ; 5.477 ; 5.000
REMARK  3  CHIRAL-CENTER RESTRAINTS    (A**3): 1164 ; 0.083 ; 0.200
REMARK  3  GENERAL PLANES REFINED ATOMS   (A): 8318 ; 0.005 ; 0.020
REMARK  3  GENERAL PLANES OTHERS       (A): 1612 ; 0.004 ; 0.020
REMARK  3  NON-BONDED CONTACTS REFINED ATOMS (A): 1763 ; 0.203 ; 0.200
REMARK  3  NON-BONDED CONTACTS OTHERS     (A): 8183 ; 0.216 ; 0.200
REMARK  3  NON-BONDED TORSION OTHERS     (A): 4673 ; 0.086 ; 0.200
REMARK  3  H-BOND (X...Y) REFINED ATOMS   (A):  186 ; 0.209 ; 0.200
REMARK  3  SYMMETRY VDW REFINED ATOMS     (A):   22 ; 0.174 ; 0.200
REMARK  3  SYMMETRY VDW OTHERS        (A):   98 ; 0.237 ; 0.200
REMARK  3  SYMMETRY H-BOND REFINED ATOMS   (A):    8 ; 0.142 ; 0.200
REMARK  3
REMARK  3 ISOTROPIC THERMAL FACTOR RESTRAINTS.   COUNT  RMS  WEIGHT
REMARK  3  MAIN-CHAIN BOND REFINED ATOMS (A**2): 4554 ; 0.534 ; 1.500
REMARK  3  MAIN-CHAIN ANGLE REFINED ATOMS (A**2): 7368 ; 1.039 ; 2.000
REMARK  3  SIDE-CHAIN BOND REFINED ATOMS (A**2): 3098 ; 1.749 ; 3.000
REMARK  3  SIDE-CHAIN ANGLE REFINED ATOMS (A**2): 2974 ; 2.997 ; 4.500

REMARK 3
REMARK 3 NCS RESTRAINTS STATISTICS
REMARK 3 NUMBER OF NCS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 TLS DETAILS
REMARK 3 NUMBER OF TLS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 BULK SOLVENT MODELLING.
REMARK 3 METHOD USED : BABINET MODEL WITH MASK
REMARK 3 PARAMETERS FOR MASK CALCULATION
REMARK 3 VDW PROBE RADIUS : 1.40
REMARK 3 ION PROBE RADIUS : 0.80
REMARK 3 SHRINKAGE RADIUS : 0.80
REMARK 3
REMARK 3 OTHER REFINEMENT REMARKS:
REMARK 3 HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK 3
LINK        SER A 242          PRO A 247          gap
LINK        PRO A 253          ALA A 259          gap
LINK        TRP C 252          ARG C 264          gap
LINK        SER D 244          LYS D 248          gap
LINK        LEU D 254          ALA D 263          gap
LINK        LEU D 444          LYS D 448          gap
CRYST1  58.717  98.929 175.815  90.00  90.00  90.00 P 21 21 21
SCALE1      0.017031 0.000000 0.000000        0.00000
SCALE2      0.000000 0.010108 0.000000        0.00000
SCALE3      0.000000 0.000000 0.005688        0.00000
ATOM      1 N   LEU A 220     25.060 40.930 59.913 1.00 15.13        N
ATOM      3 CA  LEU A 220     26.289 40.159 60.353 1.00 15.45        C
ATOM      5 CB  LEU A 220     27.291 39.950 59.207 1.00 15.67        C
ATOM      8 CG  LEU A 220     27.116 38.849 58.140 1.00 17.66        C
ATOM     10 CD1 LEU A 220     28.185 38.981 57.007 1.00 17.73        C
ATOM     14 CD2 LEU A 220     27.141 37.466 58.708 1.00 17.30        C
ATOM     18 C   LEU A 220     26.986 40.905 61.486 1.00 14.86        C
ATOM     19 O   LEU A 220     27.349 42.061 61.313 1.00 13.74        O
ATOM     22 N   THR A 221     27.168 40.237 62.630 1.00 14.79        N
ATOM     24 CA  THR A 221     27.969 40.775 63.735 1.00 15.28        C
ATOM     26 CB  THR A 221     27.770 39.961 65.068 1.00 14.97        C
ATOM     28 OG1 THR A 221     28.449 38.717 64.998 1.00 15.18        O
ATOM     30 CG2 THR A 221     26.346 39.558 65.290 1.00 16.01        C
ATOM     34 C   THR A 221     29.479 40.828 63.378 1.00 15.09        C
ATOM     35 O   THR A 221     29.945 40.137 62.487 1.00 14.81        O
ATOM     36 N   ALA A 222     30.220 41.648 64.105 1.00 15.21        N
ATOM     38 CA  ALA A 222     31.673 41.759 63.960 1.00 15.24        C
ATOM     40 CB  ALA A 222     32.183 42.803 64.908 1.00 15.12        C
ATOM     44 C   ALA A 222     32.421 40.431 64.177 1.00 15.76        C

| ATOM | 45 | O | ALA A 222 | 33.417 40.152 63.507 1.00 16.04 | O |
| ATOM | 46 | N | ALA A 223 | 31.952 39.609 65.108 1.00 15.81 | N |
| ATOM | 48 | CA | ALA A 223 | 32.576 38.301 65.341 1.00 15.78 | C |
| ATOM | 50 | CB | ALA A 223 | 31.954 37.600 66.563 1.00 15.45 | C |
| ATOM | 54 | C | ALA A 223 | 32.422 37.402 64.114 1.00 16.06 | C |
| ATOM | 55 | O | ALA A 223 | 33.327 36.657 63.773 1.00 16.18 | O |
| ATOM | 56 | N | GLN A 224 | 31.243 37.424 63.507 1.00 15.96 | N |
| ATOM | 58 | CA | GLN A 224 | 30.985 36.638 62.309 1.00 16.40 | C |
| ATOM | 60 | CB | GLN A 224 | 29.479 36.583 61.976 1.00 16.76 | C |
| ATOM | 63 | CG | GLN A 224 | 28.626 35.831 62.969 1.00 16.46 | C |
| ATOM | 66 | CD | GLN A 224 | 27.129 35.920 62.618 1.00 17.67 | C |
| ATOM | 67 | OE1 | GLN A 224 | 26.636 36.996 62.252 1.00 16.55 | O |
| ATOM | 68 | NE2 | GLN A 224 | 26.411 34.785 62.731 1.00 14.22 | N |
| ATOM | 71 | C | GLN A 224 | 31.741 37.181 61.106 1.00 15.81 | C |
| ATOM | 72 | O | GLN A 224 | 32.261 36.418 60.344 1.00 15.71 | O |
| ATOM | 73 | N | GLU A 225 | 31.816 38.490 60.933 1.00 16.23 | N |
| ATOM | 75 | CA | GLU A 225 | 32.632 39.039 59.846 1.00 17.17 | C |
| ATOM | 77 | CB | GLU A 225 | 32.440 40.554 59.707 1.00 17.63 | C |
| ATOM | 80 | CG | GLU A 225 | 31.152 40.907 58.966 1.00 21.74 | C |
| ATOM | 83 | CD | GLU A 225 | 31.003 42.396 58.650 1.00 27.29 | C |
| ATOM | 84 | OE1 | GLU A 225 | 32.021 42.978 58.212 1.00 32.71 | O |
| ATOM | 85 | OE2 | GLU A 225 | 29.883 42.995 58.837 1.00 28.94 | O |
| ATOM | 86 | C | GLU A 225 | 34.116 38.668 60.044 1.00 16.92 | C |
| ATOM | 87 | O | GLU A 225 | 34.793 38.247 59.108 1.00 15.82 | O |
| ATOM | 88 | N | LEU A 226 | 34.604 38.786 61.279 1.00 17.48 | N |
| ATOM | 90 | CA | LEU A 226 | 35.961 38.343 61.622 1.00 17.76 | C |
| ATOM | 92 | CB | LEU A 226 | 36.204 38.469 63.124 1.00 17.63 | C |
| ATOM | 95 | CG | LEU A 226 | 37.549 37.979 63.657 1.00 17.25 | C |
| ATOM | 97 | CD1 | LEU A 226 | 38.661 38.747 63.038 1.00 17.37 | C |
| ATOM | 101 | CD2 | LEU A 226 | 37.599 38.118 65.172 1.00 19.01 | C |
| ATOM | 105 | C | LEU A 226 | 36.238 36.910 61.164 1.00 18.47 | C |
| ATOM | 106 | O | LEU A 226 | 37.164 36.666 60.408 1.00 17.08 | O |
| ATOM | 107 | N | MET A 227 | 35.391 35.991 61.610 1.00 19.43 | N |
| ATOM | 109 | CA | MET A 227 | 35.537 34.586 61.306 1.00 21.31 | C |
| ATOM | 111 | CB | MET A 227 | 34.540 33.752 62.145 1.00 22.11 | C |
| ATOM | 114 | CG | MET A 227 | 33.506 32.925 61.415 1.00 28.34 | C |
| ATOM | 117 | SD | MET A 227 | 32.334 31.905 62.531 1.00 38.91 | S |
| ATOM | 118 | CE | MET A 227 | 32.594 32.703 64.096 1.00 37.78 | C |
| ATOM | 122 | C | MET A 227 | 35.471 34.293 59.792 1.00 20.86 | C |
| ATOM | 123 | O | MET A 227 | 36.271 33.518 59.281 1.00 20.78 | O |
| ATOM | 124 | N | ILE A 228 | 34.561 34.928 59.069 1.00 20.14 | N |
| ATOM | 126 | CA | ILE A 228 | 34.417 34.632 57.652 1.00 19.44 | C |
| ATOM | 128 | CB | ILE A 228 | 33.183 35.310 57.083 1.00 19.42 | C |
| ATOM | 130 | CG1 | ILE A 228 | 31.921 34.621 57.618 1.00 19.46 | C |
| ATOM | 133 | CD1 | ILE A 228 | 30.696 35.544 57.670 1.00 19.93 | C |
| ATOM | 137 | CG2 | ILE A 228 | 33.225 35.310 55.549 1.00 19.80 | C |
| ATOM | 141 | C | ILE A 228 | 35.663 35.106 56.928 1.00 19.44 | C |
| ATOM | 142 | O | ILE A 228 | 36.234 34.375 56.131 1.00 18.34 | O |

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ATOM  143 N   GLN A 229   36.078 36.332 57.238 1.00 19.45      N
ATOM  145 CA  GLN A 229   37.226 36.954 56.618 1.00 19.60      C
ATOM  147 CB  GLN A 229   37.392 38.404 57.120 1.00 19.49      C
ATOM  150 CG  GLN A 229   36.403 39.387 56.506 1.00 20.13      C
ATOM  153 CD  GLN A 229   36.463 40.823 57.104 1.00 24.05      C
ATOM  154 OE1 GLN A 229   35.688 41.697 56.683 1.00 25.94      O
ATOM  155 NE2 GLN A 229   37.375 41.065 58.057 1.00 21.74      N
ATOM  158 C   GLN A 229   38.489 36.159 56.869 1.00 20.06      C
ATOM  159 O   GLN A 229   39.393 36.157 56.025 1.00 21.36      O
ATOM  160 N   GLN A 230   38.562 35.521 58.037 1.00 20.08      N
ATOM  162 CA  GLN A 230   39.694 34.722 58.456 1.00 20.38      C
ATOM  164 CB  GLN A 230   39.474 34.252 59.910 1.00 21.01      C
ATOM  167 CG  GLN A 230   40.644 33.461 60.547 1.00 22.28      C
ATOM  170 CD  GLN A 230   41.861 34.338 60.826 1.00 23.50      C
ATOM  171 OE1 GLN A 230   41.826 35.548 60.575 1.00 27.54      O
ATOM  172 NE2 GLN A 230   42.934 33.742 61.355 1.00 24.11      N
ATOM  175 C   GLN A 230   39.825 33.504 57.541 1.00 20.37      C
ATOM  176 O   GLN A 230   40.901 33.189 57.052 1.00 21.03      O
ATOM  177 N   LEU A 231   38.711 32.825 57.332 1.00 19.33      N
ATOM  179 CA  LEU A 231   38.644 31.704 56.406 1.00 19.15      C
ATOM  181 CB  LEU A 231   37.245 31.055 56.426 1.00 18.97      C
ATOM  184 CG  LEU A 231   36.651 30.604 57.755 1.00 18.51      C
ATOM  186 CD1 LEU A 231   35.259 30.038 57.502 1.00 19.61      C
ATOM  190 CD2 LEU A 231   37.532 29.608 58.408 1.00 17.58      C
ATOM  194 C   LEU A 231   38.981 32.098 54.965 1.00 18.07      C
ATOM  195 O   LEU A 231   39.733 31.404 54.303 1.00 19.06      O
ATOM  196 N   VAL A 232   38.404 33.171 54.471 1.00 16.56      N
ATOM  198 CA  VAL A 232   38.659 33.594 53.111 1.00 16.52      C
ATOM  200 CB  VAL A 232   37.793 34.826 52.744 1.00 16.05      C
ATOM  202 CG1 VAL A 232   38.277 35.487 51.440 1.00 14.87      C
ATOM  206 CG2 VAL A 232   36.362 34.416 52.610 1.00 15.09      C
ATOM  210 C   VAL A 232   40.161 33.904 52.906 1.00 17.56      C
ATOM  211 O   VAL A 232   40.760 33.501 51.895 1.00 17.08      O
ATOM  212 N   ALA A 233   40.753 34.635 53.853 1.00 18.36      N
ATOM  214 CA  ALA A 233   42.157 35.053 53.738 1.00 19.26      C
ATOM  216 CB  ALA A 233   42.466 36.197 54.723 1.00 18.99      C
ATOM  220 C   ALA A 233   43.106 33.877 53.958 1.00 20.32      C
ATOM  221 O   ALA A 233   44.184 33.833 53.399 1.00 19.59      O
ATOM  222 N   ALA A 234   42.683 32.913 54.764 1.00 22.20      N
ATOM  224 CA  ALA A 234   43.476 31.728 55.028 1.00 23.33      C
ATOM  226 CB  ALA A 234   42.855 30.940 56.122 1.00 23.33      C
ATOM  230 C   ALA A 234   43.522 30.910 53.763 1.00 24.99      C
ATOM  231 O   ALA A 234   44.540 30.367 53.402 1.00 24.97      O
ATOM  232 N   GLN A 235   42.386 30.841 53.087 1.00 26.96      N
ATOM  234 CA  GLN A 235   42.237 30.049 51.885 1.00 28.40      C
ATOM  236 CB  GLN A 235   40.751 30.006 51.494 1.00 28.71      C
ATOM  239 CG  GLN A 235   40.451 29.293 50.198 1.00 31.32      C
ATOM  242 CD  GLN A 235   39.275 28.371 50.317 1.00 34.64      C
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| ATOM | 243 | OE1 | GLN | A | 235 | 38.141 | 28.830 | 50.488 | 1.00 | 37.17 | O |
|------|-----|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 244 | NE2 | GLN | A | 235 | 39.531 | 27.061 | 50.238 | 1.00 | 34.51 | N |
| ATOM | 247 | C | GLN | A | 235 | 43.116 | 30.603 | 50.775 | 1.00 | 28.96 | C |
| ATOM | 248 | O | GLN | A | 235 | 43.809 | 29.856 | 50.112 | 1.00 | 29.36 | O |
| ATOM | 249 | N | LEU | A | 236 | 43.120 | 31.915 | 50.619 | 1.00 | 30.11 | N |
| ATOM | 251 | CA | LEU | A | 236 | 43.962 | 32.586 | 49.638 | 1.00 | 31.34 | C |
| ATOM | 253 | CB | LEU | A | 236 | 43.509 | 34.041 | 49.522 | 1.00 | 31.53 | C |
| ATOM | 256 | CG | LEU | A | 236 | 44.041 | 34.966 | 48.423 | 1.00 | 33.04 | C |
| ATOM | 258 | CD1 | LEU | A | 236 | 44.646 | 34.248 | 47.195 | 1.00 | 34.47 | C |
| ATOM | 262 | CD2 | LEU | A | 236 | 42.890 | 35.882 | 47.971 | 1.00 | 34.38 | C |
| ATOM | 266 | C | LEU | A | 236 | 45.480 | 32.526 | 49.948 | 1.00 | 32.20 | C |
| ATOM | 267 | O | LEU | A | 236 | 46.294 | 32.434 | 49.037 | 1.00 | 31.58 | O |
| ATOM | 268 | N | GLN | A | 237 | 45.868 | 32.576 | 51.218 | 1.00 | 33.32 | N |
| ATOM | 270 | CA | GLN | A | 237 | 47.283 | 32.480 | 51.567 | 1.00 | 34.44 | C |
| ATOM | 272 | CB | GLN | A | 237 | 47.552 | 33.065 | 52.967 | 1.00 | 34.50 | C |
| ATOM | 275 | CG | GLN | A | 237 | 49.027 | 33.026 | 53.460 | 1.00 | 35.10 | C |
| ATOM | 278 | CD | GLN | A | 237 | 50.040 | 33.693 | 52.509 | 1.00 | 36.63 | C |
| ATOM | 279 | OE1 | GLN | A | 237 | 49.791 | 34.772 | 51.957 | 1.00 | 36.48 | O |
| ATOM | 280 | NE2 | GLN | A | 237 | 51.192 | 33.048 | 52.335 | 1.00 | 36.81 | N |
| ATOM | 283 | C | GLN | A | 237 | 47.786 | 31.035 | 51.423 | 1.00 | 35.77 | C |
| ATOM | 284 | O | GLN | A | 237 | 48.955 | 30.838 | 51.129 | 1.00 | 35.62 | O |
| ATOM | 285 | N | CYS | A | 238 | 46.912 | 30.034 | 51.597 | 1.00 | 37.59 | N |
| ATOM | 287 | CA | CYS | A | 238 | 47.301 | 28.615 | 51.438 | 1.00 | 39.46 | C |
| ATOM | 289 | CB | CYS | A | 238 | 46.237 | 27.649 | 51.999 | 1.00 | 39.59 | C |
| ATOM | 292 | SG | CYS | A | 238 | 46.181 | 27.601 | 53.804 | 1.00 | 40.56 | S |
| ATOM | 293 | C | CYS | A | 238 | 47.516 | 28.289 | 49.973 | 1.00 | 40.75 | C |
| ATOM | 294 | O | CYS | A | 238 | 48.401 | 27.518 | 49.614 | 1.00 | 41.33 | O |
| ATOM | 295 | N | ASN | A | 239 | 46.682 | 28.890 | 49.141 | 1.00 | 42.10 | N |
| ATOM | 297 | CA | ASN | A | 239 | 46.776 | 28.758 | 47.709 | 1.00 | 43.09 | C |
| ATOM | 299 | CB | ASN | A | 239 | 45.498 | 29.322 | 47.095 | 1.00 | 43.37 | C |
| ATOM | 302 | CG | ASN | A | 239 | 45.427 | 29.097 | 45.608 | 1.00 | 45.64 | C |
| ATOM | 303 | OD1 | ASN | A | 239 | 45.300 | 27.948 | 45.146 | 1.00 | 48.37 | O |
| ATOM | 304 | ND2 | ASN | A | 239 | 45.513 | 30.188 | 44.836 | 1.00 | 45.47 | N |
| ATOM | 307 | C | ASN | A | 239 | 48.016 | 29.479 | 47.151 | 1.00 | 43.48 | C |
| ATOM | 308 | O | ASN | A | 239 | 48.809 | 28.885 | 46.422 | 1.00 | 43.67 | O |
| ATOM | 309 | N | LYS | A | 240 | 48.177 | 30.748 | 47.520 | 1.00 | 43.94 | N |
| ATOM | 311 | CA | LYS | A | 240 | 49.254 | 31.612 | 47.027 | 1.00 | 44.29 | C |
| ATOM | 313 | CB | LYS | A | 240 | 49.130 | 33.007 | 47.666 | 1.00 | 44.30 | C |
| ATOM | 316 | CG | LYS | A | 240 | 50.205 | 34.017 | 47.283 | 1.00 | 45.01 | C |
| ATOM | 319 | CD | LYS | A | 240 | 51.068 | 34.463 | 48.497 | 1.00 | 45.64 | C |
| ATOM | 322 | CE | LYS | A | 240 | 52.528 | 34.788 | 48.123 | 1.00 | 45.21 | C |
| ATOM | 325 | NZ | LYS | A | 240 | 52.900 | 36.182 | 48.506 | 1.00 | 44.45 | N |
| ATOM | 329 | C | LYS | A | 240 | 50.638 | 31.015 | 47.284 | 1.00 | 44.77 | C |
| ATOM | 330 | O | LYS | A | 240 | 51.494 | 31.006 | 46.389 | 1.00 | 44.94 | O |
| ATOM | 331 | N | ARG | A | 241 | 50.853 | 30.484 | 48.484 | 1.00 | 45.29 | N |
| ATOM | 333 | CA | ARG | A | 241 | 52.161 | 29.936 | 48.844 | 1.00 | 45.73 | C |
| ATOM | 335 | CB | ARG | A | 241 | 52.324 | 29.860 | 50.375 | 1.00 | 45.60 | C |
| ATOM | 338 | CG | ARG | A | 241 | 51.814 | 28.620 | 51.057 | 1.00 | 45.93 | C |

| ATOM | 341 | CD  | ARG A 241 | 51.894 28.707 52.573 1.00 45.89 | C |
| ATOM | 344 | NE  | ARG A 241 | 53.247 28.478 53.068 1.00 45.29 | N |
| ATOM | 346 | CZ  | ARG A 241 | 53.574 27.711 54.112 1.00 45.70 | C |
| ATOM | 347 | NH1 | ARG A 241 | 52.652 27.064 54.823 1.00 45.14 | N |
| ATOM | 350 | NH2 | ARG A 241 | 54.853 27.593 54.452 1.00 46.29 | N |
| ATOM | 353 | C   | ARG A 241 | 52.503 28.602 48.134 1.00 46.13 | C |
| ATOM | 354 | O   | ARG A 241 | 53.655 28.377 47.773 1.00 46.44 | O |
| ATOM | 355 | N   | SER A 242 | 51.511 27.748 47.899 1.00 46.59 | N |
| ATOM | 357 | CA  | SER A 242 | 51.743 26.466 47.212 1.00 46.88 | C |
| ATOM | 359 | CB  | SER A 242 | 50.646 25.472 47.596 1.00 46.75 | C |
| ATOM | 362 | OG  | SER A 242 | 50.717 25.193 48.986 1.00 47.56 | O |
| ATOM | 364 | C   | SER A 242 | 51.857 26.576 45.674 1.00 46.93 | C |
| ATOM | 365 | O   | SER A 242 | 51.601 27.632 45.077 1.00 46.82 | O |
| ATOM | 366 | N   | PRO A 247 | 54.724 22.837 43.959 1.00 33.07 | N |
| ATOM | 367 | CA  | PRO A 247 | 56.172 22.670 43.748 1.00 33.14 | C |
| ATOM | 369 | CB  | PRO A 247 | 56.700 22.242 45.132 1.00 33.12 | C |
| ATOM | 372 | CG  | PRO A 247 | 55.471 22.096 46.032 1.00 33.34 | C |
| ATOM | 375 | CD  | PRO A 247 | 54.382 22.917 45.388 1.00 33.19 | C |
| ATOM | 378 | C   | PRO A 247 | 56.500 21.607 42.698 1.00 32.82 | C |
| ATOM | 379 | O   | PRO A 247 | 55.578 20.966 42.176 1.00 33.05 | O |
| ATOM | 380 | N   | LYS A 248 | 57.796 21.464 42.405 1.00 32.25 | N |
| ATOM | 382 | CA  | LYS A 248 | 58.371 20.452 41.487 1.00 31.95 | C |
| ATOM | 384 | CB  | LYS A 248 | 59.853 20.133 41.830 1.00 32.14 | C |
| ATOM | 387 | CG  | LYS A 248 | 60.544 20.953 42.964 1.00 33.20 | C |
| ATOM | 390 | CD  | LYS A 248 | 59.958 20.695 44.399 1.00 34.19 | C |
| ATOM | 393 | CE  | LYS A 248 | 61.060 20.551 45.479 1.00 35.05 | C |
| ATOM | 396 | NZ  | LYS A 248 | 61.959 21.762 45.631 1.00 35.51 | N |
| ATOM | 400 | C   | LYS A 248 | 57.594 19.135 41.431 1.00 31.29 | C |
| ATOM | 401 | O   | LYS A 248 | 57.233 18.584 42.470 1.00 31.80 | O |
| ATOM | 402 | N   | VAL A 249 | 57.362 18.624 40.222 1.00 30.21 | N |
| ATOM | 404 | CA  | VAL A 249 | 56.507 17.444 40.034 1.00 29.34 | C |
| ATOM | 406 | CB  | VAL A 249 | 55.043 17.844 39.690 1.00 29.36 | C |
| ATOM | 408 | CG1 | VAL A 249 | 54.175 17.827 40.936 1.00 28.98 | C |
| ATOM | 412 | CG2 | VAL A 249 | 54.983 19.217 39.012 1.00 29.91 | C |
| ATOM | 416 | C   | VAL A 249 | 57.013 16.505 38.944 1.00 28.28 | C |
| ATOM | 417 | O   | VAL A 249 | 57.743 16.920 38.067 1.00 28.23 | O |
| ATOM | 418 | N   | THR A 250 | 56.601 15.242 39.000 1.00 27.22 | N |
| ATOM | 420 | CA  | THR A 250 | 56.939 14.280 37.960 1.00 26.62 | C |
| ATOM | 422 | CB  | THR A 250 | 56.376 12.874 38.282 1.00 26.66 | C |
| ATOM | 424 | OG1 | THR A 250 | 56.952 12.373 39.496 1.00 26.45 | O |
| ATOM | 426 | CG2 | THR A 250 | 56.790 11.864 37.223 1.00 25.61 | C |
| ATOM | 430 | C   | THR A 250 | 56.327 14.775 36.656 1.00 26.23 | C |
| ATOM | 431 | O   | THR A 250 | 55.129 15.061 36.626 1.00 25.74 | O |
| ATOM | 432 | N   | PRO A 251 | 57.140 14.913 35.602 1.00 25.92 | N |
| ATOM | 433 | CA  | PRO A 251 | 56.645 15.329 34.276 1.00 25.62 | C |
| ATOM | 435 | CB  | PRO A 251 | 57.875 15.215 33.373 1.00 25.90 | C |
| ATOM | 438 | CG  | PRO A 251 | 59.057 15.249 34.281 1.00 26.42 | C |
| ATOM | 441 | CD  | PRO A 251 | 58.606 14.750 35.618 1.00 26.02 | C |

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| ATOM | 444 | C | PRO | A | 251 | 55.520 | 14.462 | 33.697 | 1.00 | 25.11 | C |
|------|-----|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 445 | O | PRO | A | 251 | 55.559 | 13.224 | 33.769 | 1.00 | 25.06 | O |
| ATOM | 446 | N | TRP | A | 252 | 54.517 | 15.146 | 33.148 | 1.00 | 24.35 | N |
| ATOM | 448 | CA | TRP | A | 252 | 53.417 | 14.522 | 32.429 | 1.00 | 23.64 | C |
| ATOM | 450 | CB | TRP | A | 252 | 52.293 | 15.552 | 32.276 | 1.00 | 23.52 | C |
| ATOM | 453 | CG | TRP | A | 252 | 51.105 | 15.050 | 31.558 | 1.00 | 23.17 | C |
| ATOM | 454 | CD1 | TRP | A | 252 | 50.777 | 15.287 | 30.258 | 1.00 | 22.55 | C |
| ATOM | 456 | NE1 | TRP | A | 252 | 49.596 | 14.657 | 29.951 | 1.00 | 23.51 | N |
| ATOM | 458 | CE2 | TRP | A | 252 | 49.138 | 13.997 | 31.062 | 1.00 | 22.59 | C |
| ATOM | 459 | CD2 | TRP | A | 252 | 50.069 | 14.223 | 32.093 | 1.00 | 22.56 | C |
| ATOM | 460 | CE3 | TRP | A | 252 | 49.826 | 13.655 | 33.348 | 1.00 | 22.89 | C |
| ATOM | 462 | CZ3 | TRP | A | 252 | 48.694 | 12.888 | 33.523 | 1.00 | 22.68 | C |
| ATOM | 464 | CH2 | TRP | A | 252 | 47.794 | 12.675 | 32.470 | 1.00 | 22.15 | C |
| ATOM | 466 | CZ2 | TRP | A | 252 | 47.998 | 13.221 | 31.239 | 1.00 | 21.90 | C |
| ATOM | 468 | C | TRP | A | 252 | 53.938 | 14.085 | 31.054 | 1.00 | 22.99 | C |
| ATOM | 469 | O | TRP | A | 252 | 54.552 | 14.888 | 30.366 | 1.00 | 22.61 | O |
| ATOM | 470 | N | PRO | A | 253 | 53.712 | 12.832 | 30.655 | 1.00 | 22.60 | N |
| ATOM | 471 | CA | PRO | A | 253 | 54.294 | 12.306 | 29.406 | 1.00 | 22.65 | C |
| ATOM | 473 | CB | PRO | A | 253 | 54.162 | 10.786 | 29.569 | 1.00 | 22.52 | C |
| ATOM | 476 | CG | PRO | A | 253 | 52.959 | 10.615 | 30.439 | 1.00 | 22.86 | C |
| ATOM | 479 | CD | PRO | A | 253 | 52.896 | 11.821 | 31.350 | 1.00 | 22.50 | C |
| ATOM | 482 | C | PRO | A | 253 | 53.567 | 12.775 | 28.143 | 1.00 | 22.39 | C |
| ATOM | 483 | O | PRO | A | 253 | 52.382 | 12.466 | 28.027 | 1.00 | 22.25 | O |
| ATOM | 484 | N | ALA | A | 259 | 49.422 | 3.445 | 24.159 | 1.00 | 31.79 | N |
| ATOM | 486 | CA | ALA | A | 259 | 49.766 | 3.864 | 25.510 | 1.00 | 31.96 | C |
| ATOM | 488 | CB | ALA | A | 259 | 48.535 | 4.456 | 26.212 | 1.00 | 31.97 | C |
| ATOM | 492 | C | ALA | A | 259 | 50.350 | 2.701 | 26.333 | 1.00 | 31.93 | C |
| ATOM | 493 | O | ALA | A | 259 | 49.638 | 1.749 | 26.675 | 1.00 | 32.13 | O |
| ATOM | 494 | N | ALA | A | 260 | 51.640 | 2.801 | 26.662 | 1.00 | 31.62 | N |
| ATOM | 496 | CA | ALA | A | 260 | 52.345 | 1.774 | 27.434 | 1.00 | 31.36 | C |
| ATOM | 498 | CB | ALA | A | 260 | 53.865 | 1.966 | 27.289 | 1.00 | 31.43 | C |
| ATOM | 502 | C | ALA | A | 260 | 51.947 | 1.741 | 28.922 | 1.00 | 31.15 | C |
| ATOM | 503 | O | ALA | A | 260 | 51.163 | 2.575 | 29.397 | 1.00 | 30.98 | O |
| ATOM | 504 | N | ALA | A | 261 | 52.501 | 0.761 | 29.644 | 1.00 | 30.82 | N |
| ATOM | 506 | CA | ALA | A | 261 | 52.275 | 0.590 | 31.086 | 1.00 | 30.41 | C |
| ATOM | 508 | CB | ALA | A | 261 | 52.496 | -0.869 | 31.499 | 1.00 | 30.46 | C |
| ATOM | 512 | C | ALA | A | 261 | 53.166 | 1.517 | 31.925 | 1.00 | 30.11 | C |
| ATOM | 513 | O | ALA | A | 261 | 52.736 | 1.981 | 32.996 | 1.00 | 29.75 | O |
| ATOM | 514 | N | ASP | A | 262 | 54.399 | 1.760 | 31.451 | 1.00 | 29.31 | N |
| ATOM | 516 | CA | ASP | A | 262 | 55.285 | 2.780 | 32.038 | 1.00 | 28.85 | C |
| ATOM | 518 | CB | ASP | A | 262 | 56.591 | 2.920 | 31.242 | 1.00 | 28.92 | C |
| ATOM | 521 | CG | ASP | A | 262 | 57.601 | 1.814 | 31.539 | 1.00 | 29.74 | C |
| ATOM | 522 | OD1 | ASP | A | 262 | 57.785 | 1.456 | 32.726 | 1.00 | 30.32 | O |
| ATOM | 523 | OD2 | ASP | A | 262 | 58.271 | 1.260 | 30.633 | 1.00 | 29.19 | O |
| ATOM | 524 | C | ASP | A | 262 | 54.600 | 4.156 | 32.073 | 1.00 | 28.24 | C |
| ATOM | 525 | O | ASP | A | 262 | 54.760 | 4.915 | 33.035 | 1.00 | 27.58 | O |
| ATOM | 526 | N | ALA | A | 263 | 53.852 | 4.460 | 31.010 | 1.00 | 27.62 | N |
| ATOM | 528 | CA | ALA | A | 263 | 53.199 | 5.757 | 30.842 | 1.00 | 27.34 | C |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 530 | CB | ALA | A | 263 | 52.822 | 5.971 | 29.392 | 1.00 27.27 | C |
| ATOM | 534 | C | ALA | A | 263 | 51.969 | 5.921 | 31.736 | 1.00 27.01 | C |
| ATOM | 535 | O | ALA | A | 263 | 51.722 | 7.012 | 32.239 | 1.00 26.97 | O |
| ATOM | 536 | N | ARG | A | 264 | 51.199 | 4.846 | 31.910 | 1.00 26.59 | N |
| ATOM | 538 | CA | ARG | A | 264 | 50.094 | 4.819 | 32.875 | 1.00 26.11 | C |
| ATOM | 540 | CB | ARG | A | 264 | 49.450 | 3.409 | 32.930 | 1.00 26.56 | C |
| ATOM | 543 | CG | ARG | A | 264 | 47.907 | 3.344 | 33.034 | 1.00 27.65 | C |
| ATOM | 546 | CD | ARG | A | 264 | 47.294 | 1.976 | 32.598 | 1.00 30.14 | C |
| ATOM | 549 | NE | ARG | A | 264 | 46.214 | 2.120 | 31.602 | 1.00 32.09 | N |
| ATOM | 551 | CZ | ARG | A | 264 | 44.891 | 2.012 | 31.846 | 1.00 33.53 | C |
| ATOM | 552 | NH1 | ARG | A | 264 | 44.417 | 1.722 | 33.059 | 1.00 33.09 | N |
| ATOM | 555 | NH2 | ARG | A | 264 | 44.022 | 2.186 | 30.852 | 1.00 34.09 | N |
| ATOM | 558 | C | ARG | A | 264 | 50.657 | 5.241 | 34.246 | 1.00 25.26 | C |
| ATOM | 559 | O | ARG | A | 264 | 50.286 | 6.280 | 34.778 | 1.00 24.99 | O |
| ATOM | 560 | N | GLN | A | 265 | 51.589 | 4.443 | 34.771 | 1.00 24.21 | N |
| ATOM | 562 | CA | GLN | A | 265 | 52.258 | 4.693 | 36.051 | 1.00 23.40 | C |
| ATOM | 564 | CB | GLN | A | 265 | 53.373 | 3.650 | 36.289 | 1.00 23.57 | C |
| ATOM | 567 | CG | GLN | A | 265 | 52.852 | 2.204 | 36.554 | 1.00 24.88 | C |
| ATOM | 570 | CD | GLN | A | 265 | 53.863 | 1.057 | 36.251 | 1.00 27.58 | C |
| ATOM | 571 | OE1 | GLN | A | 265 | 53.596 | -0.090 | 36.619 | 1.00 29.26 | O |
| ATOM | 572 | NE2 | GLN | A | 265 | 54.994 | 1.360 | 35.578 | 1.00 27.55 | N |
| ATOM | 575 | C | GLN | A | 265 | 52.833 | 6.108 | 36.124 | 1.00 22.07 | C |
| ATOM | 576 | O | GLN | A | 265 | 52.866 | 6.716 | 37.193 | 1.00 22.21 | O |
| ATOM | 577 | N | GLN | A | 266 | 53.265 | 6.633 | 34.986 | 1.00 20.33 | N |
| ATOM | 579 | CA | GLN | A | 266 | 53.733 | 8.008 | 34.896 | 1.00 19.32 | C |
| ATOM | 581 | CB | GLN | A | 266 | 54.221 | 8.312 | 33.489 | 1.00 19.42 | C |
| ATOM | 584 | CG | GLN | A | 266 | 55.094 | 9.506 | 33.429 | 1.00 20.37 | C |
| ATOM | 587 | CD | GLN | A | 266 | 56.485 | 9.151 | 33.837 | 1.00 21.46 | C |
| ATOM | 588 | OE1 | GLN | A | 266 | 56.737 | 8.905 | 35.019 | 1.00 23.58 | O |
| ATOM | 589 | NE2 | GLN | A | 266 | 57.388 | 9.085 | 32.875 | 1.00 19.41 | N |
| ATOM | 592 | C | GLN | A | 266 | 52.638 | 9.016 | 35.225 | 1.00 18.20 | C |
| ATOM | 593 | O | GLN | A | 266 | 52.788 | 9.827 | 36.122 | 1.00 17.55 | O |
| ATOM | 594 | N | ARG | A | 267 | 51.557 | 8.972 | 34.460 | 1.00 16.94 | N |
| ATOM | 596 | CA | ARG | A | 267 | 50.481 | 9.917 | 34.608 | 1.00 16.47 | C |
| ATOM | 598 | CB | ARG | A | 267 | 49.371 | 9.619 | 33.611 | 1.00 16.49 | C |
| ATOM | 601 | CG | ARG | A | 267 | 49.736 | 9.852 | 32.147 | 1.00 17.69 | C |
| ATOM | 604 | CD | ARG | A | 267 | 48.542 | 9.650 | 31.207 | 1.00 18.64 | C |
| ATOM | 607 | NE | ARG | A | 267 | 48.884 | 9.329 | 29.818 | 1.00 18.72 | N |
| ATOM | 609 | CZ | ARG | A | 267 | 49.280 | 8.128 | 29.373 | 1.00 18.73 | C |
| ATOM | 610 | NH1 | ARG | A | 267 | 49.447 | 7.094 | 30.196 | 1.00 18.38 | N |
| ATOM | 613 | NH2 | ARG | A | 267 | 49.519 | 7.964 | 28.084 | 1.00 18.47 | N |
| ATOM | 616 | C | ARG | A | 267 | 49.953 | 9.820 | 36.031 | 1.00 15.55 | C |
| ATOM | 617 | O | ARG | A | 267 | 49.721 | 10.824 | 36.677 | 1.00 15.03 | O |
| ATOM | 618 | N | PHE | A | 268 | 49.813 | 8.595 | 36.511 | 1.00 14.78 | N |
| ATOM | 620 | CA | PHE | A | 268 | 49.328 | 8.313 | 37.844 | 1.00 14.57 | C |
| ATOM | 622 | CB | PHE | A | 268 | 49.153 | 6.802 | 38.042 | 1.00 14.44 | C |
| ATOM | 625 | CG | PHE | A | 268 | 48.644 | 6.431 | 39.409 | 1.00 15.41 | C |
| ATOM | 626 | CD1 | PHE | A | 268 | 47.333 | 6.735 | 39.781 | 1.00 16.17 | C |

| ATOM | 628 | CE1 | PHE | A | 268 | 46.870 | 6.418 | 41.029 | 1.00 | 15.66 | C |
|------|-----|-----|-----|---|-----|--------|-------|--------|------|-------|---|
| ATOM | 630 | CZ | PHE | A | 268 | 47.701 | 5.803 | 41.943 | 1.00 | 15.46 | C |
| ATOM | 632 | CE2 | PHE | A | 268 | 49.006 | 5.517 | 41.614 | 1.00 | 16.39 | C |
| ATOM | 634 | CD2 | PHE | A | 268 | 49.481 | 5.827 | 40.342 | 1.00 | 15.83 | C |
| ATOM | 636 | C | PHE | A | 268 | 50.262 | 8.866 | 38.915 | 1.00 | 14.33 | C |
| ATOM | 637 | O | PHE | A | 268 | 49.802 | 9.415 | 39.901 | 1.00 | 14.80 | O |
| ATOM | 638 | N | ALA | A | 269 | 51.564 | 8.708 | 38.740 | 1.00 | 13.95 | N |
| ATOM | 640 | CA | ALA | A | 269 | 52.519 | 9.278 | 39.671 | 1.00 | 13.81 | C |
| ATOM | 642 | CB | ALA | A | 269 | 53.952 | 8.923 | 39.272 | 1.00 | 13.84 | C |
| ATOM | 646 | C | ALA | A | 269 | 52.337 | 10.784 | 39.692 | 1.00 | 13.92 | C |
| ATOM | 647 | O | ALA | A | 269 | 52.425 | 11.408 | 40.728 | 1.00 | 13.48 | O |
| ATOM | 648 | N | HIS | A | 270 | 52.065 | 11.353 | 38.531 | 1.00 | 14.53 | N |
| ATOM | 650 | CA | HIS | A | 270 | 51.950 | 12.792 | 38.371 | 1.00 | 15.16 | C |
| ATOM | 652 | CB | HIS | A | 270 | 51.847 | 13.132 | 36.863 | 1.00 | 15.31 | C |
| ATOM | 655 | CG | HIS | A | 270 | 51.558 | 14.568 | 36.586 | 1.00 | 16.76 | C |
| ATOM | 656 | ND1 | HIS | A | 270 | 52.532 | 15.544 | 36.607 | 1.00 | 17.80 | N |
| ATOM | 658 | CE1 | HIS | A | 270 | 51.982 | 16.717 | 36.349 | 1.00 | 17.48 | C |
| ATOM | 660 | NE2 | HIS | A | 270 | 50.687 | 16.536 | 36.161 | 1.00 | 18.24 | N |
| ATOM | 662 | CD2 | HIS | A | 270 | 50.394 | 15.201 | 36.309 | 1.00 | 17.72 | C |
| ATOM | 664 | C | HIS | A | 270 | 50.767 | 13.335 | 39.190 | 1.00 | 15.34 | C |
| ATOM | 665 | O | HIS | A | 270 | 50.933 | 14.279 | 39.933 | 1.00 | 15.27 | O |
| ATOM | 666 | N | PHE | A | 271 | 49.607 | 12.691 | 39.094 | 1.00 | 15.80 | N |
| ATOM | 668 | CA | PHE | A | 271 | 48.375 | 13.154 | 39.732 | 1.00 | 16.36 | C |
| ATOM | 670 | CB | PHE | A | 271 | 47.198 | 12.370 | 39.184 | 1.00 | 16.83 | C |
| ATOM | 673 | CG | PHE | A | 271 | 46.637 | 12.890 | 37.892 | 1.00 | 18.89 | C |
| ATOM | 674 | CD1 | PHE | A | 271 | 46.672 | 14.235 | 37.568 | 1.00 | 20.17 | C |
| ATOM | 676 | CE1 | PHE | A | 271 | 46.117 | 14.690 | 36.381 | 1.00 | 21.37 | C |
| ATOM | 678 | CZ | PHE | A | 271 | 45.499 | 13.811 | 35.518 | 1.00 | 21.87 | C |
| ATOM | 680 | CE2 | PHE | A | 271 | 45.452 | 12.465 | 35.832 | 1.00 | 21.99 | C |
| ATOM | 682 | CD2 | PHE | A | 271 | 46.018 | 12.011 | 37.012 | 1.00 | 21.37 | C |
| ATOM | 684 | C | PHE | A | 271 | 48.392 | 12.907 | 41.228 | 1.00 | 16.44 | C |
| ATOM | 685 | O | PHE | A | 271 | 47.848 | 13.665 | 42.007 | 1.00 | 16.74 | O |
| ATOM | 686 | N | THR | A | 272 | 48.979 | 11.786 | 41.604 | 1.00 | 16.45 | N |
| ATOM | 688 | CA | THR | A | 272 | 49.315 | 11.465 | 42.984 | 1.00 | 16.20 | C |
| ATOM | 690 | CB | THR | A | 272 | 50.091 | 10.095 | 42.987 | 1.00 | 16.35 | C |
| ATOM | 692 | OG1 | THR | A | 272 | 49.502 | 9.215 | 43.930 | 1.00 | 18.82 | O |
| ATOM | 694 | CG2 | THR | A | 272 | 51.555 | 10.205 | 43.424 | 1.00 | 17.10 | C |
| ATOM | 698 | C | THR | A | 272 | 50.109 | 12.604 | 43.635 | 1.00 | 15.40 | C |
| ATOM | 699 | O | THR | A | 272 | 49.839 | 12.984 | 44.768 | 1.00 | 14.67 | O |
| ATOM | 700 | N | GLU | A | 273 | 51.073 | 13.165 | 42.903 | 1.00 | 15.13 | N |
| ATOM | 702 | CA | GLU | A | 273 | 51.881 | 14.272 | 43.421 | 1.00 | 14.90 | C |
| ATOM | 704 | CB | GLU | A | 273 | 53.159 | 14.412 | 42.607 | 1.00 | 15.52 | C |
| ATOM | 707 | CG | GLU | A | 273 | 54.132 | 13.250 | 42.861 | 1.00 | 16.25 | C |
| ATOM | 710 | CD | GLU | A | 273 | 55.249 | 13.169 | 41.859 | 1.00 | 17.92 | C |
| ATOM | 711 | OE1 | GLU | A | 273 | 55.767 | 14.231 | 41.459 | 1.00 | 20.84 | O |
| ATOM | 712 | OE2 | GLU | A | 273 | 55.652 | 12.039 | 41.496 | 1.00 | 21.55 | O |
| ATOM | 713 | C | GLU | A | 273 | 51.098 | 15.593 | 43.497 | 1.00 | 14.74 | C |
| ATOM | 714 | O | GLU | A | 273 | 51.260 | 16.344 | 44.447 | 1.00 | 14.46 | O |

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ATOM   715 N   LEU A 274    50.218 15.862 42.535 1.00 14.42        N
ATOM   717 CA  LEU A 274    49.336 17.031 42.631 1.00 14.65        C
ATOM   719 CB  LEU A 274    48.498 17.207 41.345 1.00 14.63        C
ATOM   722 CG  LEU A 274    49.284 17.516 40.068 1.00 14.28        C
ATOM   724 CD1 LEU A 274    48.414 17.415 38.840 1.00 15.31        C
ATOM   728 CD2 LEU A 274    49.888 18.887 40.131 1.00 14.98        C
ATOM   732 C   LEU A 274    48.409 16.917 43.851 1.00 14.54        C
ATOM   733 O   LEU A 274    48.110 17.909 44.509 1.00 14.70        O
ATOM   734 N   ALA A 275    47.983 15.693 44.149 1.00 13.96        N
ATOM   736 CA  ALA A 275    47.077 15.424 45.260 1.00 13.49        C
ATOM   738 CB  ALA A 275    46.490 13.991 45.142 1.00 13.71        C
ATOM   742 C   ALA A 275    47.769 15.614 46.599 1.00 12.71        C
ATOM   743 O   ALA A 275    47.163 16.055 47.552 1.00 13.39        O
ATOM   744 N   ILE A 276    49.043 15.296 46.680 1.00 12.15        N
ATOM   746 CA  ILE A 276    49.822 15.584 47.880 1.00 11.63        C
ATOM   748 CB  ILE A 276    51.239 14.963 47.771 1.00 11.58        C
ATOM   750 CG1 ILE A 276    51.135 13.464 48.083 1.00 12.30        C
ATOM   753 CD1 ILE A 276    52.253 12.660 47.555 1.00 10.66        C
ATOM   757 CG2 ILE A 276    52.208 15.634 48.723 1.00 10.38        C
ATOM   761 C   ILE A 276    49.937 17.077 48.118 1.00 11.95        C
ATOM   762 O   ILE A 276    49.870 17.516 49.255 1.00 10.18        O
ATOM   763 N   ILE A 277    50.176 17.841 47.047 1.00 13.10        N
ATOM   765 CA  ILE A 277    50.234 19.300 47.133 1.00 13.53        C
ATOM   767 CB  ILE A 277    50.340 19.980 45.751 1.00 13.51        C
ATOM   769 CG1 ILE A 277    51.642 19.656 45.007 1.00 14.87        C
ATOM   772 CD1 ILE A 277    52.851 19.778 45.806 1.00 16.04        C
ATOM   776 CG2 ILE A 277    50.176 21.496 45.919 1.00 14.18        C
ATOM   780 C   ILE A 277    48.933 19.780 47.767 1.00 13.48        C
ATOM   781 O   ILE A 277    48.949 20.580 48.693 1.00 13.40        O
ATOM   782 N   SER A 278    47.807 19.310 47.246 1.00 13.36        N
ATOM   784 CA  SER A 278    46.491 19.716 47.775 1.00 14.14        C
ATOM   786 CB  SER A 278    45.351 19.118 46.931 1.00 14.44        C
ATOM   789 OG  SER A 278    44.147 18.996 47.666 1.00 17.27        O
ATOM   791 C   SER A 278    46.319 19.312 49.227 1.00 13.88        C
ATOM   792 O   SER A 278    45.755 20.055 50.011 1.00 14.45        O
ATOM   793 N   VAL A 279    46.808 18.136 49.594 1.00 13.99        N
ATOM   795 CA  VAL A 279    46.679 17.690 50.964 1.00 14.81        C
ATOM   797 CB  VAL A 279    47.216 16.249 51.143 1.00 14.88        C
ATOM   799 CG1 VAL A 279    47.349 15.886 52.625 1.00 14.84        C
ATOM   803 CG2 VAL A 279    46.281 15.239 50.453 1.00 14.52        C
ATOM   807 C   VAL A 279    47.398 18.692 51.874 1.00 15.98        C
ATOM   808 O   VAL A 279    46.882 19.094 52.900 1.00 16.77        O
ATOM   809 N   GLN A 280    48.576 19.131 51.464 1.00 16.73        N
ATOM   811 CA  GLN A 280    49.358 20.081 52.240 1.00 17.30        C
ATOM   813 CB  GLN A 280    50.696 20.330 51.561 1.00 17.11        C
ATOM   816 CG  GLN A 280    51.648 21.199 52.336 1.00 18.49        C
ATOM   819 CD  GLN A 280    52.821 21.698 51.489 1.00 20.11        C
ATOM   820 OE1 GLN A 280    52.691 21.886 50.276 1.00 20.62        O
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| ATOM | 821 | NE2 | GLN | A | 280 | 53.968 | 21.885 | 52.126 | 1.00 | 17.93 | N |
| ATOM | 824 | C | GLN | A | 280 | 48.607 | 21.393 | 52.425 | 1.00 | 17.42 | C |
| ATOM | 825 | O | GLN | A | 280 | 48.573 | 21.919 | 53.509 | 1.00 | 17.16 | O |
| ATOM | 826 | N | GLU | A | 281 | 47.999 | 21.901 | 51.369 | 1.00 | 17.96 | N |
| ATOM | 828 | CA | GLU | A | 281 | 47.150 | 23.077 | 51.490 | 1.00 | 19.38 | C |
| ATOM | 830 | CB | GLU | A | 281 | 46.479 | 23.404 | 50.170 | 1.00 | 19.70 | C |
| ATOM | 833 | CG | GLU | A | 281 | 47.420 | 23.843 | 49.093 | 1.00 | 22.42 | C |
| ATOM | 836 | CD | GLU | A | 281 | 46.660 | 24.233 | 47.856 | 1.00 | 27.65 | C |
| ATOM | 837 | OE1 | GLU | A | 281 | 46.934 | 23.643 | 46.792 | 1.00 | 30.06 | O |
| ATOM | 838 | OE2 | GLU | A | 281 | 45.782 | 25.135 | 47.962 | 1.00 | 31.96 | O |
| ATOM | 839 | C | GLU | A | 281 | 46.043 | 22.888 | 52.500 | 1.00 | 19.28 | C |
| ATOM | 840 | O | GLU | A | 281 | 45.854 | 23.709 | 53.358 | 1.00 | 19.90 | O |
| ATOM | 841 | N | ILE | A | 282 | 45.307 | 21.796 | 52.390 | 1.00 | 19.77 | N |
| ATOM | 843 | CA | ILE | A | 282 | 44.146 | 21.576 | 53.245 | 1.00 | 19.42 | C |
| ATOM | 845 | CB | ILE | A | 282 | 43.429 | 20.290 | 52.816 | 1.00 | 19.20 | C |
| ATOM | 847 | CG1 | ILE | A | 282 | 42.746 | 20.483 | 51.465 | 1.00 | 18.34 | C |
| ATOM | 850 | CD1 | ILE | A | 282 | 42.449 | 19.148 | 50.700 | 1.00 | 17.40 | C |
| ATOM | 854 | CG2 | ILE | A | 282 | 42.458 | 19.819 | 53.876 | 1.00 | 19.76 | C |
| ATOM | 858 | C | ILE | A | 282 | 44.553 | 21.502 | 54.711 | 1.00 | 20.02 | C |
| ATOM | 859 | O | ILE | A | 282 | 43.876 | 22.077 | 55.575 | 1.00 | 19.86 | O |
| ATOM | 860 | N | VAL | A | 283 | 45.636 | 20.775 | 54.990 | 1.00 | 20.45 | N |
| ATOM | 862 | CA | VAL | A | 283 | 46.130 | 20.610 | 56.361 | 1.00 | 21.08 | C |
| ATOM | 864 | CB | VAL | A | 283 | 47.408 | 19.701 | 56.449 | 1.00 | 20.75 | C |
| ATOM | 866 | CG1 | VAL | A | 283 | 48.047 | 19.807 | 57.813 | 1.00 | 19.55 | C |
| ATOM | 870 | CG2 | VAL | A | 283 | 47.070 | 18.227 | 56.137 | 1.00 | 21.29 | C |
| ATOM | 874 | C | VAL | A | 283 | 46.480 | 21.960 | 56.957 | 1.00 | 21.88 | C |
| ATOM | 875 | O | VAL | A | 283 | 46.096 | 22.243 | 58.078 | 1.00 | 22.73 | O |
| ATOM | 876 | N | ASP | A | 284 | 47.250 | 22.754 | 56.206 | 1.00 | 21.96 | N |
| ATOM | 878 | CA | ASP | A | 284 | 47.655 | 24.103 | 56.577 | 1.00 | 22.32 | C |
| ATOM | 880 | CB | ASP | A | 284 | 48.577 | 24.698 | 55.479 | 1.00 | 22.91 | C |
| ATOM | 883 | CG | ASP | A | 284 | 50.020 | 24.107 | 55.480 | 1.00 | 27.11 | C |
| ATOM | 884 | OD1 | ASP | A | 284 | 50.889 | 24.703 | 54.784 | 1.00 | 30.69 | O |
| ATOM | 885 | OD2 | ASP | A | 284 | 50.395 | 23.067 | 56.106 | 1.00 | 31.70 | O |
| ATOM | 886 | C | ASP | A | 284 | 46.425 | 25.030 | 56.773 | 1.00 | 21.69 | C |
| ATOM | 887 | O | ASP | A | 284 | 46.407 | 25.840 | 57.660 | 1.00 | 21.91 | O |
| ATOM | 888 | N | PHE | A | 285 | 45.411 | 24.908 | 55.932 | 1.00 | 21.20 | N |
| ATOM | 890 | CA | PHE | A | 285 | 44.184 | 25.687 | 56.068 | 1.00 | 21.41 | C |
| ATOM | 892 | CB | PHE | A | 285 | 43.310 | 25.533 | 54.809 | 1.00 | 20.47 | C |
| ATOM | 895 | CG | PHE | A | 285 | 41.915 | 26.101 | 54.959 | 1.00 | 20.10 | C |
| ATOM | 896 | CD1 | PHE | A | 285 | 41.652 | 27.439 | 54.699 | 1.00 | 20.08 | C |
| ATOM | 898 | CE1 | PHE | A | 285 | 40.362 | 27.961 | 54.842 | 1.00 | 18.61 | C |
| ATOM | 900 | CZ | PHE | A | 285 | 39.340 | 27.144 | 55.257 | 1.00 | 18.38 | C |
| ATOM | 902 | CE2 | PHE | A | 285 | 39.597 | 25.818 | 55.542 | 1.00 | 20.39 | C |
| ATOM | 904 | CD2 | PHE | A | 285 | 40.870 | 25.298 | 55.384 | 1.00 | 18.65 | C |
| ATOM | 906 | C | PHE | A | 285 | 43.393 | 25.309 | 57.350 | 1.00 | 21.80 | C |
| ATOM | 907 | O | PHE | A | 285 | 42.930 | 26.183 | 58.079 | 1.00 | 21.00 | O |
| ATOM | 908 | N | ALA | A | 286 | 43.250 | 24.007 | 57.599 | 1.00 | 22.45 | N |
| ATOM | 910 | CA | ALA | A | 286 | 42.525 | 23.497 | 58.759 | 1.00 | 22.55 | C |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 912 | CB | ALA | A | 286 | 42.534 | 22.013 | 58.751 | 1.00 21.84 | C |
| ATOM | 916 | C | ALA | A | 286 | 43.087 | 24.021 | 60.086 | 1.00 23.89 | C |
| ATOM | 917 | O | ALA | A | 286 | 42.329 | 24.439 | 60.940 | 1.00 23.39 | O |
| ATOM | 918 | N | LYS | A | 287 | 44.410 | 24.029 | 60.262 | 1.00 25.94 | N |
| ATOM | 920 | CA | LYS | A | 287 | 45.015 | 24.533 | 61.513 | 1.00 27.03 | C |
| ATOM | 922 | CB | LYS | A | 287 | 46.507 | 24.197 | 61.565 | 1.00 28.33 | C |
| ATOM | 925 | CG | LYS | A | 287 | 46.819 | 22.686 | 61.828 | 1.00 32.10 | C |
| ATOM | 928 | CD | LYS | A | 287 | 46.778 | 22.320 | 63.378 | 1.00 35.99 | C |
| ATOM | 931 | CE | LYS | A | 287 | 47.553 | 20.974 | 63.752 | 1.00 37.37 | C |
| ATOM | 934 | NZ | LYS | A | 287 | 46.837 | 19.675 | 63.380 | 1.00 36.79 | N |
| ATOM | 938 | C | LYS | A | 287 | 44.792 | 26.046 | 61.744 | 1.00 27.29 | C |
| ATOM | 939 | O | LYS | A | 287 | 45.130 | 26.584 | 62.816 | 1.00 28.49 | O |
| ATOM | 940 | N | GLN | A | 288 | 44.221 | 26.732 | 60.753 | 1.00 26.39 | N |
| ATOM | 942 | CA | GLN | A | 288 | 43.874 | 28.147 | 60.863 | 1.00 25.65 | C |
| ATOM | 944 | CB | GLN | A | 288 | 44.391 | 28.877 | 59.638 | 1.00 25.37 | C |
| ATOM | 947 | CG | GLN | A | 288 | 45.840 | 28.657 | 59.473 | 1.00 28.98 | C |
| ATOM | 950 | CD | GLN | A | 288 | 46.530 | 29.881 | 59.075 | 1.00 31.64 | C |
| ATOM | 951 | OE1 | GLN | A | 288 | 47.098 | 30.589 | 59.911 | 1.00 34.69 | O |
| ATOM | 952 | NE2 | GLN | A | 288 | 46.469 | 30.178 | 57.793 | 1.00 35.01 | N |
| ATOM | 955 | C | GLN | A | 288 | 42.373 | 28.388 | 60.978 | 1.00 24.59 | C |
| ATOM | 956 | O | GLN | A | 288 | 41.934 | 29.528 | 61.136 | 1.00 23.94 | O |
| ATOM | 957 | N | VAL | A | 289 | 41.588 | 27.329 | 60.840 | 1.00 23.23 | N |
| ATOM | 959 | CA | VAL | A | 289 | 40.164 | 27.437 | 61.071 | 1.00 22.95 | C |
| ATOM | 961 | CB | VAL | A | 289 | 39.438 | 26.211 | 60.571 | 1.00 22.40 | C |
| ATOM | 963 | CG1 | VAL | A | 289 | 37.983 | 26.292 | 60.952 | 1.00 23.31 | C |
| ATOM | 967 | CG2 | VAL | A | 289 | 39.612 | 26.072 | 59.068 | 1.00 20.88 | C |
| ATOM | 971 | C | VAL | A | 289 | 39.978 | 27.592 | 62.575 | 1.00 22.64 | C |
| ATOM | 972 | O | VAL | A | 289 | 40.404 | 26.735 | 63.311 | 1.00 22.81 | O |
| ATOM | 973 | N | PRO | A | 290 | 39.404 | 28.692 | 63.051 | 1.00 22.42 | N |
| ATOM | 974 | CA | PRO | A | 290 | 39.137 | 28.825 | 64.494 | 1.00 22.62 | C |
| ATOM | 976 | CB | PRO | A | 290 | 38.396 | 30.150 | 64.589 | 1.00 22.56 | C |
| ATOM | 979 | CG | PRO | A | 290 | 38.922 | 30.917 | 63.436 | 1.00 23.19 | C |
| ATOM | 982 | CD | PRO | A | 290 | 39.017 | 29.899 | 62.314 | 1.00 22.20 | C |
| ATOM | 985 | C | PRO | A | 290 | 38.291 | 27.676 | 65.047 | 1.00 22.64 | C |
| ATOM | 986 | O | PRO | A | 290 | 37.255 | 27.358 | 64.468 | 1.00 22.25 | O |
| ATOM | 987 | N | GLY | A | 291 | 38.751 | 27.065 | 66.134 | 1.00 22.94 | N |
| ATOM | 989 | CA | GLY | A | 291 | 38.121 | 25.879 | 66.683 | 1.00 23.65 | C |
| ATOM | 992 | C | GLY | A | 291 | 38.995 | 24.637 | 66.533 | 1.00 24.02 | C |
| ATOM | 993 | O | GLY | A | 291 | 39.035 | 23.783 | 67.423 | 1.00 24.52 | O |
| ATOM | 994 | N | PHE | A | 292 | 39.719 | 24.534 | 65.426 | 1.00 23.97 | N |
| ATOM | 996 | CA | PHE | A | 292 | 40.445 | 23.307 | 65.129 | 1.00 23.94 | C |
| ATOM | 998 | CB | PHE | A | 292 | 41.023 | 23.375 | 63.728 | 1.00 23.45 | C |
| ATOM | 1001 | CG | PHE | A | 292 | 41.578 | 22.085 | 63.250 | 1.00 21.82 | C |
| ATOM | 1002 | CD1 | PHE | A | 292 | 40.732 | 21.064 | 62.828 | 1.00 19.41 | C |
| ATOM | 1004 | CE1 | PHE | A | 292 | 41.234 | 19.874 | 62.391 | 1.00 19.10 | C |
| ATOM | 1006 | CZ | PHE | A | 292 | 42.605 | 19.667 | 62.357 | 1.00 20.35 | C |
| ATOM | 1008 | CE2 | PHE | A | 292 | 43.461 | 20.666 | 62.779 | 1.00 21.11 | C |
| ATOM | 1010 | CD2 | PHE | A | 292 | 42.941 | 21.880 | 63.218 | 1.00 20.01 | C |

| ATOM | 1012 | C | PHE A 292 | 41.526 22.950 66.161 1.00 24.87 | C |
|------|------|-----|-----------|---------------------------------|---|
| ATOM | 1013 | O | PHE A 292 | 41.698 21.780 66.516 1.00 24.60 | O |
| ATOM | 1014 | N | LEU A 293 | 42.245 23.938 66.674 1.00 25.98 | N |
| ATOM | 1016 | CA | LEU A 293 | 43.294 23.640 67.657 1.00 26.80 | C |
| ATOM | 1018 | CB | LEU A 293 | 44.482 24.610 67.522 1.00 27.55 | C |
| ATOM | 1021 | CG | LEU A 293 | 45.426 24.276 66.332 1.00 30.13 | C |
| ATOM | 1023 | CD1 | LEU A 293 | 46.377 25.443 66.010 1.00 30.34 | C |
| ATOM | 1027 | CD2 | LEU A 293 | 46.245 22.995 66.565 1.00 31.46 | C |
| ATOM | 1031 | C | LEU A 293 | 42.763 23.560 69.106 1.00 26.18 | C |
| ATOM | 1032 | O | LEU A 293 | 43.478 23.152 70.001 1.00 25.92 | O |
| ATOM | 1033 | N | GLN A 294 | 41.502 23.911 69.319 1.00 25.95 | N |
| ATOM | 1035 | CA | GLN A 294 | 40.815 23.613 70.588 1.00 25.70 | C |
| ATOM | 1037 | CB | GLN A 294 | 39.466 24.344 70.673 1.00 25.93 | C |
| ATOM | 1040 | CG | GLN A 294 | 39.558 25.872 70.801 1.00 26.59 | C |
| ATOM | 1043 | CD | GLN A 294 | 38.229 26.544 70.525 1.00 28.47 | C |
| ATOM | 1044 | OE1 | GLN A 294 | 38.162 27.566 69.818 1.00 30.90 | O |
| ATOM | 1045 | NE2 | GLN A 294 | 37.161 25.974 71.068 1.00 30.91 | N |
| ATOM | 1048 | C | GLN A 294 | 40.548 22.111 70.764 1.00 25.05 | C |
| ATOM | 1049 | O | GLN A 294 | 40.272 21.681 71.865 1.00 24.73 | O |
| ATOM | 1050 | N | LEU A 295 | 40.591 21.333 69.673 1.00 24.15 | N |
| ATOM | 1052 | CA | LEU A 295 | 40.401 19.879 69.717 1.00 23.01 | C |
| ATOM | 1054 | CB | LEU A 295 | 39.927 19.357 68.358 1.00 22.96 | C |
| ATOM | 1057 | CG | LEU A 295 | 38.507 19.746 67.927 1.00 24.00 | C |
| ATOM | 1059 | CD1 | LEU A 295 | 38.202 19.233 66.544 1.00 23.39 | C |
| ATOM | 1063 | CD2 | LEU A 295 | 37.457 19.227 68.942 1.00 25.45 | C |
| ATOM | 1067 | C | LEU A 295 | 41.684 19.149 70.077 1.00 22.31 | C |
| ATOM | 1068 | O | LEU A 295 | 42.779 19.625 69.776 1.00 21.89 | O |
| ATOM | 1069 | N | GLY A 296 | 41.540 17.980 70.708 1.00 21.41 | N |
| ATOM | 1071 | CA | GLY A 296 | 42.663 17.104 70.977 1.00 20.64 | C |
| ATOM | 1074 | C | GLY A 296 | 43.296 16.632 69.690 1.00 20.72 | C |
| ATOM | 1075 | O | GLY A 296 | 42.643 16.616 68.628 1.00 20.45 | O |
| ATOM | 1076 | N | ARG A 297 | 44.564 16.256 69.767 1.00 20.79 | N |
| ATOM | 1078 | CA | ARG A 297 | 45.304 15.833 68.585 1.00 21.83 | C |
| ATOM | 1080 | CB | ARG A 297 | 46.768 15.477 68.923 1.00 22.29 | C |
| ATOM | 1083 | CG | ARG A 297 | 47.742 15.855 67.793 1.00 26.10 | C |
| ATOM | 1086 | CD | ARG A 297 | 49.251 15.569 68.055 1.00 31.77 | C |
| ATOM | 1089 | NE | ARG A 297 | 49.943 15.212 66.805 1.00 35.40 | N |
| ATOM | 1091 | CZ | ARG A 297 | 50.247 13.968 66.402 1.00 39.10 | C |
| ATOM | 1092 | NH1 | ARG A 297 | 49.964 12.893 67.148 1.00 39.38 | N |
| ATOM | 1095 | NH2 | ARG A 297 | 50.856 13.796 65.228 1.00 40.91 | N |
| ATOM | 1098 | C | ARG A 297 | 44.607 14.665 67.881 1.00 21.67 | C |
| ATOM | 1099 | O | ARG A 297 | 44.577 14.584 66.637 1.00 21.10 | O |
| ATOM | 1100 | N | GLU A 298 | 44.025 13.763 68.663 1.00 21.69 | N |
| ATOM | 1102 | CA | GLU A 298 | 43.399 12.583 68.064 1.00 21.70 | C |
| ATOM | 1104 | CB | GLU A 298 | 43.006 11.551 69.120 1.00 22.29 | C |
| ATOM | 1107 | CG | GLU A 298 | 43.859 10.300 69.066 1.00 26.31 | C |
| ATOM | 1110 | CD | GLU A 298 | 45.289 10.530 69.545 1.00 31.15 | C |
| ATOM | 1111 | OE1 | GLU A 298 | 46.067 11.227 68.844 1.00 34.54 | O |

| ATOM | 1112 | OE2 | GLU | A | 298 | 45.642 | 10.001 | 70.624 | 1.00 | 33.78 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 1113 | C   | GLU | A | 298 | 42.212 | 12.959 | 67.179 | 1.00 | 20.17 | C |
| ATOM | 1114 | O   | GLU | A | 298 | 42.075 | 12.446 | 66.063 | 1.00 | 18.29 | O |
| ATOM | 1115 | N   | ASP | A | 299 | 41.376 | 13.861 | 67.667 | 1.00 | 19.77 | N |
| ATOM | 1117 | CA  | ASP | A | 299 | 40.245 | 14.346 | 66.869 | 1.00 | 20.44 | C |
| ATOM | 1119 | CB  | ASP | A | 299 | 39.245 | 15.121 | 67.722 | 1.00 | 20.18 | C |
| ATOM | 1122 | CG  | ASP | A | 299 | 38.439 | 14.204 | 68.619 | 1.00 | 21.95 | C |
| ATOM | 1123 | OD1 | ASP | A | 299 | 38.605 | 12.955 | 68.494 | 1.00 | 22.28 | O |
| ATOM | 1124 | OD2 | ASP | A | 299 | 37.647 | 14.629 | 69.493 | 1.00 | 24.19 | O |
| ATOM | 1125 | C   | ASP | A | 299 | 40.675 | 15.174 | 65.677 | 1.00 | 20.59 | C |
| ATOM | 1126 | O   | ASP | A | 299 | 40.052 | 15.092 | 64.635 | 1.00 | 21.48 | O |
| ATOM | 1127 | N   | GLN | A | 300 | 41.753 | 15.936 | 65.826 | 1.00 | 20.59 | N |
| ATOM | 1129 | CA  | GLN | A | 300 | 42.296 | 16.728 | 64.743 | 1.00 | 20.89 | C |
| ATOM | 1131 | CB  | GLN | A | 300 | 43.520 | 17.505 | 65.209 | 1.00 | 20.98 | C |
| ATOM | 1134 | CG  | GLN | A | 300 | 43.211 | 18.759 | 65.984 | 1.00 | 21.79 | C |
| ATOM | 1137 | CD  | GLN | A | 300 | 44.471 | 19.457 | 66.511 | 1.00 | 24.15 | C |
| ATOM | 1138 | OE1 | GLN | A | 300 | 44.390 | 20.212 | 67.468 | 1.00 | 26.85 | O |
| ATOM | 1139 | NE2 | GLN | A | 300 | 45.623 | 19.205 | 65.889 | 1.00 | 23.70 | N |
| ATOM | 1142 | C   | GLN | A | 300 | 42.686 | 15.836 | 63.587 | 1.00 | 20.82 | C |
| ATOM | 1143 | O   | GLN | A | 300 | 42.343 | 16.119 | 62.439 | 1.00 | 21.20 | O |
| ATOM | 1144 | N   | ILE | A | 301 | 43.395 | 14.753 | 63.910 | 1.00 | 20.32 | N |
| ATOM | 1146 | CA  | ILE | A | 301 | 43.769 | 13.762 | 62.935 | 1.00 | 19.62 | C |
| ATOM | 1148 | CB  | ILE | A | 301 | 44.767 | 12.748 | 63.539 | 1.00 | 20.10 | C |
| ATOM | 1150 | CG1 | ILE | A | 301 | 46.154 | 13.393 | 63.642 | 1.00 | 19.43 | C |
| ATOM | 1153 | CD1 | ILE | A | 301 | 47.094 | 12.652 | 64.553 | 1.00 | 20.19 | C |
| ATOM | 1157 | CG2 | ILE | A | 301 | 44.861 | 11.468 | 62.662 | 1.00 | 19.73 | C |
| ATOM | 1161 | C   | ILE | A | 301 | 42.528 | 13.081 | 62.369 | 1.00 | 19.30 | C |
| ATOM | 1162 | O   | ILE | A | 301 | 42.393 | 12.934 | 61.155 | 1.00 | 20.20 | O |
| ATOM | 1163 | N   | ALA | A | 302 | 41.592 | 12.699 | 63.213 | 1.00 | 18.41 | N |
| ATOM | 1165 | CA  | ALA | A | 302 | 40.423 | 11.988 | 62.705 | 1.00 | 17.85 | C |
| ATOM | 1167 | CB  | ALA | A | 302 | 39.596 | 11.477 | 63.848 | 1.00 | 17.81 | C |
| ATOM | 1171 | C   | ALA | A | 302 | 39.581 | 12.853 | 61.730 | 1.00 | 17.44 | C |
| ATOM | 1172 | O   | ALA | A | 302 | 39.141 | 12.349 | 60.689 | 1.00 | 16.93 | O |
| ATOM | 1173 | N   | LEU | A | 303 | 39.388 | 14.139 | 62.037 | 1.00 | 17.37 | N |
| ATOM | 1175 | CA  | LEU | A | 303 | 38.604 | 15.043 | 61.173 | 1.00 | 17.82 | C |
| ATOM | 1177 | CB  | LEU | A | 303 | 38.300 | 16.363 | 61.873 | 1.00 | 17.79 | C |
| ATOM | 1180 | CG  | LEU | A | 303 | 37.480 | 16.301 | 63.158 | 1.00 | 18.21 | C |
| ATOM | 1182 | CD1 | LEU | A | 303 | 37.279 | 17.701 | 63.689 | 1.00 | 17.38 | C |
| ATOM | 1186 | CD2 | LEU | A | 303 | 36.154 | 15.590 | 62.942 | 1.00 | 19.92 | C |
| ATOM | 1190 | C   | LEU | A | 303 | 39.301 | 15.371 | 59.849 | 1.00 | 18.27 | C |
| ATOM | 1191 | O   | LEU | A | 303 | 38.660 | 15.510 | 58.837 | 1.00 | 17.83 | O |
| ATOM | 1192 | N   | LEU | A | 304 | 40.621 | 15.498 | 59.873 | 1.00 | 19.62 | N |
| ATOM | 1194 | CA  | LEU | A | 304 | 41.403 | 15.679 | 58.652 | 1.00 | 20.56 | C |
| ATOM | 1196 | CB  | LEU | A | 304 | 42.834 | 16.034 | 59.006 | 1.00 | 20.86 | C |
| ATOM | 1199 | CG  | LEU | A | 304 | 43.051 | 17.515 | 59.237 | 1.00 | 22.96 | C |
| ATOM | 1201 | CD1 | LEU | A | 304 | 44.480 | 17.746 | 59.691 | 1.00 | 24.33 | C |
| ATOM | 1205 | CD2 | LEU | A | 304 | 42.745 | 18.325 | 57.974 | 1.00 | 25.50 | C |
| ATOM | 1209 | C   | LEU | A | 304 | 41.412 | 14.443 | 57.758 | 1.00 | 20.17 | C |

| ATOM | 1210 | O | LEU A 304 | 41.271 | 14.540 | 56.560 | 1.00 | 20.16 | O |
| ATOM | 1211 | N | LYS A 305 | 41.571 | 13.279 | 58.352 | 1.00 | 20.84 | N |
| ATOM | 1213 | CA | LYS A 305 | 41.569 | 12.034 | 57.601 | 1.00 | 21.26 | C |
| ATOM | 1215 | CB | LYS A 305 | 41.650 | 10.840 | 58.571 | 1.00 | 22.15 | C |
| ATOM | 1218 | CG | LYS A 305 | 42.794 | 9.817 | 58.317 | 1.00 | 23.68 | C |
| ATOM | 1221 | CD | LYS A 305 | 43.955 | 10.024 | 59.284 | 1.00 | 25.40 | C |
| ATOM | 1224 | CE | LYS A 305 | 45.192 | 9.197 | 58.921 | 1.00 | 25.14 | C |
| ATOM | 1227 | NZ | LYS A 305 | 45.648 | 8.320 | 60.048 | 1.00 | 25.27 | N |
| ATOM | 1231 | C | LYS A 305 | 40.274 | 11.964 | 56.779 | 1.00 | 21.35 | C |
| ATOM | 1232 | O | LYS A 305 | 40.280 | 11.754 | 55.545 | 1.00 | 21.00 | O |
| ATOM | 1233 | N | ALA A 306 | 39.156 | 12.190 | 57.456 | 1.00 | 20.89 | N |
| ATOM | 1235 | CA | ALA A 306 | 37.855 | 12.083 | 56.798 | 1.00 | 20.64 | C |
| ATOM | 1237 | CB | ALA A 306 | 36.760 | 11.955 | 57.841 | 1.00 | 20.73 | C |
| ATOM | 1241 | C | ALA A 306 | 37.569 | 13.242 | 55.838 | 1.00 | 20.23 | C |
| ATOM | 1242 | O | ALA A 306 | 36.977 | 13.038 | 54.794 | 1.00 | 20.34 | O |
| ATOM | 1243 | N | SER A 307 | 38.026 | 14.443 | 56.165 | 1.00 | 19.59 | N |
| ATOM | 1245 | CA | SER A 307 | 37.675 | 15.630 | 55.391 | 1.00 | 19.91 | C |
| ATOM | 1247 | CB | SER A 307 | 37.931 | 16.901 | 56.212 | 1.00 | 20.19 | C |
| ATOM | 1250 | OG | SER A 307 | 36.768 | 17.182 | 56.937 | 1.00 | 25.77 | O |
| ATOM | 1252 | C | SER A 307 | 38.480 | 15.773 | 54.130 | 1.00 | 19.11 | C |
| ATOM | 1253 | O | SER A 307 | 38.041 | 16.433 | 53.190 | 1.00 | 18.68 | O |
| ATOM | 1254 | N | THR A 308 | 39.696 | 15.237 | 54.138 | 1.00 | 17.89 | N |
| ATOM | 1256 | CA | THR A 308 | 40.646 | 15.594 | 53.122 | 1.00 | 17.45 | C |
| ATOM | 1258 | CB | THR A 308 | 41.983 | 14.910 | 53.345 | 1.00 | 17.47 | C |
| ATOM | 1260 | OG1 | THR A 308 | 42.680 | 15.539 | 54.440 | 1.00 | 15.82 | O |
| ATOM | 1262 | CG2 | THR A 308 | 42.886 | 15.176 | 52.174 | 1.00 | 17.07 | C |
| ATOM | 1266 | C | THR A 308 | 40.124 | 15.315 | 51.721 | 1.00 | 17.43 | C |
| ATOM | 1267 | O | THR A 308 | 40.159 | 16.190 | 50.878 | 1.00 | 17.33 | O |
| ATOM | 1268 | N | ILE A 309 | 39.625 | 14.120 | 51.472 | 1.00 | 17.46 | N |
| ATOM | 1270 | CA | ILE A 309 | 39.153 | 13.784 | 50.119 | 1.00 | 18.16 | C |
| ATOM | 1272 | CB | ILE A 309 | 38.797 | 12.265 | 49.988 | 1.00 | 18.17 | C |
| ATOM | 1274 | CG1 | ILE A 309 | 38.542 | 11.879 | 48.541 | 1.00 | 18.77 | C |
| ATOM | 1277 | CD1 | ILE A 309 | 39.783 | 11.691 | 47.752 | 1.00 | 21.05 | C |
| ATOM | 1281 | CG2 | ILE A 309 | 37.551 | 11.885 | 50.817 | 1.00 | 17.38 | C |
| ATOM | 1285 | C | ILE A 309 | 37.972 | 14.686 | 49.730 | 1.00 | 18.04 | C |
| ATOM | 1286 | O | ILE A 309 | 37.879 | 15.150 | 48.598 | 1.00 | 17.64 | O |
| ATOM | 1287 | N | GLU A 310 | 37.100 | 14.957 | 50.685 | 1.00 | 18.37 | N |
| ATOM | 1289 | CA | GLU A 310 | 35.921 | 15.803 | 50.440 | 1.00 | 19.49 | C |
| ATOM | 1291 | CB | GLU A 310 | 34.990 | 15.776 | 51.659 | 1.00 | 19.25 | C |
| ATOM | 1294 | CG | GLU A 310 | 34.449 | 14.367 | 51.869 | 1.00 | 21.65 | C |
| ATOM | 1297 | CD | GLU A 310 | 33.388 | 14.236 | 52.957 | 1.00 | 22.47 | C |
| ATOM | 1298 | OE1 | GLU A 310 | 32.837 | 15.275 | 53.350 | 1.00 | 23.37 | O |
| ATOM | 1299 | OE2 | GLU A 310 | 33.105 | 13.085 | 53.398 | 1.00 | 19.22 | O |
| ATOM | 1300 | C | GLU A 310 | 36.289 | 17.244 | 50.070 | 1.00 | 19.19 | C |
| ATOM | 1301 | O | GLU A 310 | 35.742 | 17.808 | 49.125 | 1.00 | 20.59 | O |
| ATOM | 1302 | N | ILE A 311 | 37.238 | 17.825 | 50.790 | 1.00 | 18.33 | N |
| ATOM | 1304 | CA | ILE A 311 | 37.696 | 19.178 | 50.504 | 1.00 | 17.23 | C |
| ATOM | 1306 | CB | ILE A 311 | 38.582 | 19.669 | 51.637 | 1.00 | 16.82 | C |

| ATOM | 1308 | CG1 | ILE A 311 | 37.772 | 19.715 | 52.952 | 1.00 | 16.30 | C |
| ATOM | 1311 | CD1 | ILE A 311 | 38.615 | 19.946 | 54.200 | 1.00 | 16.45 | C |
| ATOM | 1315 | CG2 | ILE A 311 | 39.139 | 21.050 | 51.306 | 1.00 | 17.62 | C |
| ATOM | 1319 | C   | ILE A 311 | 38.413 | 19.219 | 49.139 | 1.00 | 16.48 | C |
| ATOM | 1320 | O   | ILE A 311 | 38.248 | 20.152 | 48.370 | 1.00 | 16.19 | O |
| ATOM | 1321 | N   | MET A 312 | 39.145 | 18.166 | 48.830 | 1.00 | 16.06 | N |
| ATOM | 1323 | CA  | MET A 312 | 39.837 | 18.042 | 47.574 | 1.00 | 16.26 | C |
| ATOM | 1325 | CB  | MET A 312 | 40.615 | 16.729 | 47.479 | 1.00 | 16.63 | C |
| ATOM | 1328 | CG  | MET A 312 | 41.881 | 16.692 | 48.231 | 1.00 | 19.96 | C |
| ATOM | 1331 | SD  | MET A 312 | 42.969 | 15.273 | 47.818 | 1.00 | 24.73 | S |
| ATOM | 1332 | CE  | MET A 312 | 43.078 | 15.386 | 46.128 | 1.00 | 17.57 | C |
| ATOM | 1336 | C   | MET A 312 | 38.854 | 18.049 | 46.453 | 1.00 | 15.49 | C |
| ATOM | 1337 | O   | MET A 312 | 39.137 | 18.627 | 45.440 | 1.00 | 14.65 | O |
| ATOM | 1338 | N   | LEU A 313 | 37.727 | 17.356 | 46.620 | 1.00 | 15.38 | N |
| ATOM | 1340 | CA  | LEU A 313 | 36.708 | 17.309 | 45.585 | 1.00 | 15.44 | C |
| ATOM | 1342 | CB  | LEU A 313 | 35.601 | 16.308 | 45.907 | 1.00 | 15.59 | C |
| ATOM | 1345 | CG  | LEU A 313 | 36.025 | 14.853 | 45.774 | 1.00 | 15.79 | C |
| ATOM | 1347 | CD1 | LEU A 313 | 35.081 | 13.994 | 46.579 | 1.00 | 17.22 | C |
| ATOM | 1351 | CD2 | LEU A 313 | 36.041 | 14.422 | 44.322 | 1.00 | 15.14 | C |
| ATOM | 1355 | C   | LEU A 313 | 36.111 | 18.680 | 45.424 | 1.00 | 15.72 | C |
| ATOM | 1356 | O   | LEU A 313 | 35.863 | 19.124 | 44.298 | 1.00 | 16.03 | O |
| ATOM | 1357 | N   | LEU A 314 | 35.880 | 19.357 | 46.538 | 1.00 | 15.98 | N |
| ATOM | 1359 | CA  | LEU A 314 | 35.398 | 20.745 | 46.485 | 1.00 | 16.72 | C |
| ATOM | 1361 | CB  | LEU A 314 | 35.214 | 21.285 | 47.902 | 1.00 | 16.68 | C |
| ATOM | 1364 | CG  | LEU A 314 | 33.861 | 21.706 | 48.451 | 1.00 | 19.36 | C |
| ATOM | 1366 | CD1 | LEU A 314 | 32.691 | 21.290 | 47.581 | 1.00 | 19.73 | C |
| ATOM | 1370 | CD2 | LEU A 314 | 33.653 | 21.229 | 49.917 | 1.00 | 19.76 | C |
| ATOM | 1374 | C   | LEU A 314 | 36.374 | 21.630 | 45.704 | 1.00 | 17.15 | C |
| ATOM | 1375 | O   | LEU A 314 | 35.960 | 22.385 | 44.832 | 1.00 | 16.98 | O |
| ATOM | 1376 | N   | GLU A 315 | 37.675 | 21.513 | 46.002 | 1.00 | 17.91 | N |
| ATOM | 1378 | CA  | GLU A 315 | 38.718 | 22.322 | 45.340 | 1.00 | 18.50 | C |
| ATOM | 1380 | CB  | GLU A 315 | 40.090 | 22.136 | 46.037 | 1.00 | 18.99 | C |
| ATOM | 1383 | CG  | GLU A 315 | 40.261 | 22.870 | 47.368 | 1.00 | 22.30 | C |
| ATOM | 1386 | CD  | GLU A 315 | 39.999 | 24.370 | 47.260 | 1.00 | 28.75 | C |
| ATOM | 1387 | OE1 | GLU A 315 | 40.882 | 25.092 | 46.747 | 1.00 | 33.76 | O |
| ATOM | 1388 | OE2 | GLU A 315 | 38.883 | 24.824 | 47.645 | 1.00 | 33.52 | O |
| ATOM | 1389 | C   | GLU A 315 | 38.824 | 21.969 | 43.846 | 1.00 | 17.84 | C |
| ATOM | 1390 | O   | GLU A 315 | 39.072 | 22.830 | 42.978 | 1.00 | 17.24 | O |
| ATOM | 1391 | N   | THR A 316 | 38.600 | 20.701 | 43.546 | 1.00 | 16.95 | N |
| ATOM | 1393 | CA  | THR A 316 | 38.612 | 20.246 | 42.182 | 1.00 | 16.70 | C |
| ATOM | 1395 | CB  | THR A 316 | 38.583 | 18.732 | 42.152 | 1.00 | 16.75 | C |
| ATOM | 1397 | OG1 | THR A 316 | 39.785 | 18.226 | 42.744 | 1.00 | 13.92 | O |
| ATOM | 1399 | CG2 | THR A 316 | 38.547 | 18.187 | 40.683 | 1.00 | 14.98 | C |
| ATOM | 1403 | C   | THR A 316 | 37.418 | 20.824 | 41.428 | 1.00 | 18.11 | C |
| ATOM | 1404 | O   | THR A 316 | 37.558 | 21.228 | 40.289 | 1.00 | 18.69 | O |
| ATOM | 1405 | N   | ALA A 317 | 36.248 | 20.882 | 42.059 | 1.00 | 19.67 | N |
| ATOM | 1407 | CA  | ALA A 317 | 35.057 | 21.445 | 41.406 | 1.00 | 20.76 | C |
| ATOM | 1409 | CB  | ALA A 317 | 33.859 | 21.314 | 42.294 | 1.00 | 20.68 | C |

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ATOM   1413 C   ALA A 317    35.284 22.908 41.038 1.00 21.54        C
ATOM   1414 O   ALA A 317    34.913 23.349 39.943 1.00 22.69        O
ATOM   1415 N   ARG A 318    35.934 23.623 41.947 1.00 22.02        N
ATOM   1417 CA  ARG A 318    36.313 25.033 41.796 1.00 22.80        C
ATOM   1419 CB  ARG A 318    37.094 25.465 43.038 1.00 23.87        C
ATOM   1422 CG  ARG A 318    36.573 26.602 43.856 1.00 27.49        C
ATOM   1425 CD  ARG A 318    37.322 26.668 45.163 1.00 33.60        C
ATOM   1428 NE  ARG A 318    37.035 27.843 45.987 1.00 39.43        N
ATOM   1430 CZ  ARG A 318    37.516 29.056 45.772 1.00 42.41        C
ATOM   1431 NH1 ARG A 318    38.325 29.293 44.736 1.00 44.52        N
ATOM   1434 NH2 ARG A 318    37.180 30.043 46.599 1.00 43.04        N
ATOM   1437 C   ARG A 318    37.230 25.307 40.615 1.00 21.79        C
ATOM   1438 O   ARG A 318    37.245 26.411 40.086 1.00 21.76        O
ATOM   1439 N   ARG A 319    38.044 24.317 40.259 1.00 20.98        N
ATOM   1441 CA  ARG A 319    39.023 24.421 39.171 1.00 20.20        C
ATOM   1443 CB  ARG A 319    40.313 23.710 39.568 1.00 20.14        C
ATOM   1446 CG  ARG A 319    41.082 24.401 40.647 1.00 20.81        C
ATOM   1449 CD  ARG A 319    42.014 23.486 41.412 1.00 23.29        C
ATOM   1452 NE  ARG A 319    42.885 24.247 42.294 1.00 24.81        N
ATOM   1454 CZ  ARG A 319    42.504 24.799 43.426 1.00 26.82        C
ATOM   1455 NH1 ARG A 319    41.265 24.659 43.852 1.00 28.73        N
ATOM   1458 NH2 ARG A 319    43.371 25.490 44.155 1.00 29.94        N
ATOM   1461 C   ARG A 319    38.538 23.826 37.850 1.00 19.77        C
ATOM   1462 O   ARG A 319    39.312 23.733 36.881 1.00 18.83        O
ATOM   1463 N   TYR A 320    37.283 23.387 37.835 1.00 19.44        N
ATOM   1465 CA  TYR A 320    36.613 22.945 36.616 1.00 19.71        C
ATOM   1467 CB  TYR A 320    35.365 22.116 36.956 1.00 19.39        C
ATOM   1470 CG  TYR A 320    34.596 21.588 35.769 1.00 18.73        C
ATOM   1471 CD1 TYR A 320    35.123 20.608 34.962 1.00 19.98        C
ATOM   1473 CE1 TYR A 320    34.416 20.112 33.868 1.00 20.60        C
ATOM   1475 CZ  TYR A 320    33.167 20.603 33.575 1.00 20.46        C
ATOM   1476 OH  TYR A 320    32.486 20.107 32.487 1.00 20.85        O
ATOM   1478 CE2 TYR A 320    32.611 21.578 34.370 1.00 19.65        C
ATOM   1480 CD2 TYR A 320    33.328 22.063 35.463 1.00 19.36        C
ATOM   1482 C   TYR A 320    36.239 24.163 35.769 1.00 20.30        C
ATOM   1483 O   TYR A 320    35.657 25.127 36.254 1.00 19.92        O
ATOM   1484 N   ASN A 321    36.613 24.115 34.501 1.00 21.61        N
ATOM   1486 CA  ASN A 321    36.217 25.110 33.536 1.00 22.66        C
ATOM   1488 CB  ASN A 321    37.409 25.484 32.663 1.00 23.12        C
ATOM   1491 CG  ASN A 321    37.143 26.698 31.800 1.00 22.84        C
ATOM   1492 OD1 ASN A 321    37.647 27.782 32.069 1.00 24.62        O
ATOM   1493 ND2 ASN A 321    36.348 26.524 30.771 1.00 20.92        N
ATOM   1496 C   ASN A 321    35.096 24.525 32.697 1.00 23.60        C
ATOM   1497 O   ASN A 321    35.313 23.608 31.918 1.00 23.48        O
ATOM   1498 N   HIS A 322    33.895 25.053 32.892 1.00 25.23        N
ATOM   1500 CA  HIS A 322    32.693 24.646 32.156 1.00 26.51        C
ATOM   1502 CB  HIS A 322    31.492 25.513 32.633 1.00 27.27        C
ATOM   1505 CG  HIS A 322    30.275 25.424 31.762 1.00 29.99        C
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| ATOM | 1506 | ND1 | HIS | A | 322 | 29.601 | 24.240 | 31.535 | 1.00 | 32.54 | N |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 1508 | CE1 | HIS | A | 322 | 28.586 | 24.463 | 30.713 | 1.00 | 34.07 | C |
| ATOM | 1510 | NE2 | HIS | A | 322 | 28.571 | 25.750 | 30.404 | 1.00 | 34.11 | N |
| ATOM | 1512 | CD2 | HIS | A | 322 | 29.611 | 26.376 | 31.058 | 1.00 | 33.10 | C |
| ATOM | 1514 | C | HIS | A | 322 | 32.891 | 24.711 | 30.633 | 1.00 | 26.52 | C |
| ATOM | 1515 | O | HIS | A | 322 | 32.418 | 23.833 | 29.900 | 1.00 | 26.62 | O |
| ATOM | 1516 | N | GLU | A | 323 | 33.617 | 25.722 | 30.158 | 1.00 | 26.77 | N |
| ATOM | 1518 | CA | GLU | A | 323 | 33.748 | 25.980 | 28.712 | 1.00 | 26.91 | C |
| ATOM | 1520 | CB | GLU | A | 323 | 34.133 | 27.448 | 28.469 | 1.00 | 27.10 | C |
| ATOM | 1523 | CG | GLU | A | 323 | 33.148 | 28.221 | 27.591 | 1.00 | 28.96 | C |
| ATOM | 1526 | CD | GLU | A | 323 | 32.215 | 29.128 | 28.383 | 1.00 | 30.50 | C |
| ATOM | 1527 | OE1 | GLU | A | 323 | 32.234 | 29.079 | 29.638 | 1.00 | 30.87 | O |
| ATOM | 1528 | OE2 | GLU | A | 323 | 31.461 | 29.899 | 27.740 | 1.00 | 30.74 | O |
| ATOM | 1529 | C | GLU | A | 323 | 34.735 | 25.057 | 27.963 | 1.00 | 26.84 | C |
| ATOM | 1530 | O | GLU | A | 323 | 34.592 | 24.847 | 26.761 | 1.00 | 26.37 | O |
| ATOM | 1531 | N | THR | A | 324 | 35.739 | 24.534 | 28.670 | 1.00 | 26.82 | N |
| ATOM | 1533 | CA | THR | A | 324 | 36.721 | 23.609 | 28.099 | 1.00 | 26.57 | C |
| ATOM | 1535 | CB | THR | A | 324 | 38.190 | 24.074 | 28.416 | 1.00 | 26.67 | C |
| ATOM | 1537 | OG1 | THR | A | 324 | 38.467 | 24.031 | 29.833 | 1.00 | 25.10 | O |
| ATOM | 1539 | CG2 | THR | A | 324 | 38.416 | 25.538 | 28.015 | 1.00 | 26.34 | C |
| ATOM | 1543 | C | THR | A | 324 | 36.507 | 22.164 | 28.583 | 1.00 | 26.77 | C |
| ATOM | 1544 | O | THR | A | 324 | 37.143 | 21.254 | 28.075 | 1.00 | 26.83 | O |
| ATOM | 1545 | N | GLU | A | 325 | 35.598 | 21.962 | 29.538 | 1.00 | 26.97 | N |
| ATOM | 1547 | CA | GLU | A | 325 | 35.375 | 20.663 | 30.204 | 1.00 | 27.23 | C |
| ATOM | 1549 | CB | GLU | A | 325 | 34.689 | 19.675 | 29.234 | 1.00 | 27.47 | C |
| ATOM | 1552 | CG | GLU | A | 325 | 33.233 | 19.344 | 29.587 | 1.00 | 28.20 | C |
| ATOM | 1555 | CD | GLU | A | 325 | 32.398 | 18.812 | 28.408 | 1.00 | 29.54 | C |
| ATOM | 1556 | OE1 | GLU | A | 325 | 32.727 | 19.079 | 27.222 | 1.00 | 29.64 | O |
| ATOM | 1557 | OE2 | GLU | A | 325 | 31.383 | 18.126 | 28.668 | 1.00 | 29.96 | O |
| ATOM | 1558 | C | GLU | A | 325 | 36.669 | 20.077 | 30.829 | 1.00 | 27.23 | C |
| ATOM | 1559 | O | GLU | A | 325 | 36.837 | 18.854 | 30.934 | 1.00 | 27.55 | O |
| ATOM | 1560 | N | CYS | A | 326 | 37.563 | 20.971 | 31.256 | 1.00 | 26.85 | N |
| ATOM | 1562 | CA | CYS | A | 326 | 38.877 | 20.606 | 31.795 | 1.00 | 26.31 | C |
| ATOM | 1564 | CB | CYS | A | 326 | 39.991 | 21.098 | 30.864 | 1.00 | 26.31 | C |
| ATOM | 1567 | SG | CYS | A | 326 | 40.201 | 20.150 | 29.337 | 1.00 | 27.85 | S |
| ATOM | 1568 | C | CYS | A | 326 | 39.095 | 21.213 | 33.180 | 1.00 | 25.45 | C |
| ATOM | 1569 | O | CYS | A | 326 | 38.497 | 22.234 | 33.523 | 1.00 | 25.10 | O |
| ATOM | 1570 | N | ILE | A | 327 | 39.979 | 20.577 | 33.947 | 1.00 | 24.73 | N |
| ATOM | 1572 | CA | ILE | A | 327 | 40.265 | 20.934 | 35.332 | 1.00 | 24.35 | C |
| ATOM | 1574 | CB | ILE | A | 327 | 40.046 | 19.699 | 36.227 | 1.00 | 24.35 | C |
| ATOM | 1576 | CG1 | ILE | A | 327 | 38.560 | 19.368 | 36.321 | 1.00 | 24.03 | C |
| ATOM | 1579 | CD1 | ILE | A | 327 | 38.310 | 18.010 | 36.913 | 1.00 | 25.32 | C |
| ATOM | 1583 | CG2 | ILE | A | 327 | 40.634 | 19.908 | 37.604 | 1.00 | 23.73 | C |
| ATOM | 1587 | C | ILE | A | 327 | 41.711 | 21.398 | 35.429 | 1.00 | 24.23 | C |
| ATOM | 1588 | O | ILE | A | 327 | 42.596 | 20.722 | 34.925 | 1.00 | 23.97 | O |
| ATOM | 1589 | N | THR | A | 328 | 41.945 | 22.521 | 36.108 | 1.00 | 24.35 | N |
| ATOM | 1591 | CA | THR | A | 328 | 43.262 | 23.135 | 36.176 | 1.00 | 24.56 | C |
| ATOM | 1593 | CB | THR | A | 328 | 43.221 | 24.573 | 35.612 | 1.00 | 24.72 | C |

| ATOM | 1595 | OG1 | THR | A | 328 | 42.759 | 24.549 | 34.254 | 1.00 | 24.62 | O |
| ATOM | 1597 | CG2 | THR | A | 328 | 44.638 | 25.177 | 35.492 | 1.00 | 24.73 | C |
| ATOM | 1601 | C | THR | A | 328 | 43.827 | 23.146 | 37.601 | 1.00 | 25.13 | C |
| ATOM | 1602 | O | THR | A | 328 | 43.288 | 23.805 | 38.511 | 1.00 | 24.81 | O |
| ATOM | 1603 | N | PHE | A | 329 | 44.932 | 22.421 | 37.773 | 1.00 | 25.28 | N |
| ATOM | 1605 | CA | PHE | A | 329 | 45.690 | 22.429 | 39.013 | 1.00 | 25.63 | C |
| ATOM | 1607 | CB | PHE | A | 329 | 46.168 | 21.003 | 39.303 | 1.00 | 25.28 | C |
| ATOM | 1610 | CG | PHE | A | 329 | 45.058 | 19.981 | 39.249 | 1.00 | 23.41 | C |
| ATOM | 1611 | CD1 | PHE | A | 329 | 45.075 | 18.960 | 38.309 | 1.00 | 21.30 | C |
| ATOM | 1613 | CE1 | PHE | A | 329 | 44.050 | 18.042 | 38.242 | 1.00 | 20.33 | C |
| ATOM | 1615 | CZ | PHE | A | 329 | 42.978 | 18.125 | 39.127 | 1.00 | 20.10 | C |
| ATOM | 1617 | CE2 | PHE | A | 329 | 42.943 | 19.139 | 40.075 | 1.00 | 21.64 | C |
| ATOM | 1619 | CD2 | PHE | A | 329 | 43.976 | 20.068 | 40.128 | 1.00 | 21.59 | C |
| ATOM | 1621 | C | PHE | A | 329 | 46.859 | 23.413 | 38.923 | 1.00 | 27.08 | C |
| ATOM | 1622 | O | PHE | A | 329 | 47.514 | 23.529 | 37.879 | 1.00 | 27.03 | O |
| ATOM | 1623 | N | LEU | A | 330 | 47.086 | 24.162 | 39.999 | 1.00 | 28.88 | N |
| ATOM | 1625 | CA | LEU | A | 330 | 48.317 | 24.959 | 40.168 | 1.00 | 30.33 | C |
| ATOM | 1627 | CB | LEU | A | 330 | 49.543 | 24.024 | 40.284 | 1.00 | 30.46 | C |
| ATOM | 1630 | CG | LEU | A | 330 | 49.540 | 22.997 | 41.419 | 1.00 | 30.49 | C |
| ATOM | 1632 | CD1 | LEU | A | 330 | 50.613 | 21.962 | 41.199 | 1.00 | 31.98 | C |
| ATOM | 1636 | CD2 | LEU | A | 330 | 49.751 | 23.668 | 42.752 | 1.00 | 30.65 | C |
| ATOM | 1640 | C | LEU | A | 330 | 48.575 | 25.998 | 39.062 | 1.00 | 31.29 | C |
| ATOM | 1641 | O | LEU | A | 330 | 49.695 | 26.113 | 38.556 | 1.00 | 31.45 | O |
| ATOM | 1642 | N | LYS | A | 331 | 47.547 | 26.748 | 38.682 | 1.00 | 32.74 | N |
| ATOM | 1644 | CA | LYS | A | 331 | 47.668 | 27.785 | 37.632 | 1.00 | 33.73 | C |
| ATOM | 1646 | CB | LYS | A | 331 | 48.877 | 28.735 | 37.855 | 1.00 | 34.21 | C |
| ATOM | 1649 | CG | LYS | A | 331 | 49.110 | 29.269 | 39.284 | 1.00 | 35.79 | C |
| ATOM | 1652 | CD | LYS | A | 331 | 49.871 | 30.635 | 39.289 | 1.00 | 37.37 | C |
| ATOM | 1655 | CE | LYS | A | 331 | 49.066 | 31.744 | 40.025 | 1.00 | 38.72 | C |
| ATOM | 1658 | NZ | LYS | A | 331 | 49.126 | 33.069 | 39.324 | 1.00 | 38.94 | N |
| ATOM | 1662 | C | LYS | A | 331 | 47.805 | 27.247 | 36.211 | 1.00 | 33.94 | C |
| ATOM | 1663 | O | LYS | A | 331 | 47.389 | 27.907 | 35.269 | 1.00 | 34.65 | O |
| ATOM | 1664 | N | ASP | A | 332 | 48.401 | 26.070 | 36.047 | 1.00 | 34.28 | N |
| ATOM | 1666 | CA | ASP | A | 332 | 49.005 | 25.697 | 34.772 | 1.00 | 34.16 | C |
| ATOM | 1668 | CB | ASP | A | 332 | 50.527 | 25.843 | 34.872 | 1.00 | 34.39 | C |
| ATOM | 1671 | CG | ASP | A | 332 | 51.040 | 27.045 | 34.125 | 1.00 | 34.51 | C |
| ATOM | 1672 | OD1 | ASP | A | 332 | 50.978 | 27.038 | 32.876 | 1.00 | 34.87 | O |
| ATOM | 1673 | OD2 | ASP | A | 332 | 51.504 | 28.047 | 34.708 | 1.00 | 35.55 | O |
| ATOM | 1674 | C | ASP | A | 332 | 48.700 | 24.301 | 34.268 | 1.00 | 33.94 | C |
| ATOM | 1675 | O | ASP | A | 332 | 48.561 | 24.108 | 33.060 | 1.00 | 34.65 | O |
| ATOM | 1676 | N | PHE | A | 333 | 48.677 | 23.323 | 35.166 | 1.00 | 33.39 | N |
| ATOM | 1678 | CA | PHE | A | 333 | 48.485 | 21.929 | 34.775 | 1.00 | 32.85 | C |
| ATOM | 1680 | CB | PHE | A | 333 | 49.024 | 20.986 | 35.863 | 1.00 | 32.98 | C |
| ATOM | 1683 | CG | PHE | A | 333 | 50.520 | 21.059 | 36.031 | 1.00 | 33.52 | C |
| ATOM | 1684 | CD1 | PHE | A | 333 | 51.087 | 21.780 | 37.072 | 1.00 | 33.91 | C |
| ATOM | 1686 | CE1 | PHE | A | 333 | 52.471 | 21.862 | 37.213 | 1.00 | 33.43 | C |
| ATOM | 1688 | CZ | PHE | A | 333 | 53.286 | 21.229 | 36.318 | 1.00 | 33.89 | C |
| ATOM | 1690 | CE2 | PHE | A | 333 | 52.735 | 20.521 | 35.261 | 1.00 | 34.47 | C |

| ATOM | 1692 | CD2 | PHE | A | 333 | 51.358 | 20.440 | 35.121 | 1.00 | 34.19 | C |
| ATOM | 1694 | C | PHE | A | 333 | 47.022 | 21.665 | 34.501 | 1.00 | 31.92 | C |
| ATOM | 1695 | O | PHE | A | 333 | 46.222 | 21.708 | 35.410 | 1.00 | 31.94 | O |
| ATOM | 1696 | N | THR | A | 334 | 46.688 | 21.383 | 33.245 | 1.00 | 31.20 | N |
| ATOM | 1698 | CA | THR | A | 334 | 45.300 | 21.254 | 32.796 | 1.00 | 30.75 | C |
| ATOM | 1700 | CB | THR | A | 334 | 45.014 | 22.318 | 31.727 | 1.00 | 30.62 | C |
| ATOM | 1702 | OG1 | THR | A | 334 | 45.207 | 23.613 | 32.303 | 1.00 | 30.79 | O |
| ATOM | 1704 | CG2 | THR | A | 334 | 43.545 | 22.322 | 31.316 | 1.00 | 30.43 | C |
| ATOM | 1708 | C | THR | A | 334 | 45.023 | 19.864 | 32.242 | 1.00 | 30.23 | C |
| ATOM | 1709 | O | THR | A | 334 | 45.861 | 19.304 | 31.551 | 1.00 | 30.23 | O |
| ATOM | 1710 | N | TYR | A | 335 | 43.842 | 19.320 | 32.544 | 1.00 | 29.92 | N |
| ATOM | 1712 | CA | TYR | A | 335 | 43.501 | 17.931 | 32.205 | 1.00 | 29.62 | C |
| ATOM | 1714 | CB | TYR | A | 335 | 43.867 | 16.986 | 33.366 | 1.00 | 29.47 | C |
| ATOM | 1717 | CG | TYR | A | 335 | 45.325 | 17.092 | 33.729 | 1.00 | 29.58 | C |
| ATOM | 1718 | CD1 | TYR | A | 335 | 45.737 | 17.850 | 34.823 | 1.00 | 29.29 | C |
| ATOM | 1720 | CE1 | TYR | A | 335 | 47.079 | 17.973 | 35.134 | 1.00 | 29.82 | C |
| ATOM | 1722 | CZ | TYR | A | 335 | 48.024 | 17.362 | 34.325 | 1.00 | 29.99 | C |
| ATOM | 1723 | OH | TYR | A | 335 | 49.358 | 17.476 | 34.607 | 1.00 | 31.94 | O |
| ATOM | 1725 | CE2 | TYR | A | 335 | 47.640 | 16.635 | 33.219 | 1.00 | 29.71 | C |
| ATOM | 1727 | CD2 | TYR | A | 335 | 46.302 | 16.508 | 32.922 | 1.00 | 29.36 | C |
| ATOM | 1729 | C | TYR | A | 335 | 42.030 | 17.762 | 31.864 | 1.00 | 29.38 | C |
| ATOM | 1730 | O | TYR | A | 335 | 41.177 | 18.458 | 32.405 | 1.00 | 29.15 | O |
| ATOM | 1731 | N | SER | A | 336 | 41.745 | 16.813 | 30.976 | 1.00 | 29.15 | N |
| ATOM | 1733 | CA | SER | A | 336 | 40.384 | 16.524 | 30.541 | 1.00 | 28.85 | C |
| ATOM | 1735 | CB | SER | A | 336 | 40.307 | 16.527 | 29.021 | 1.00 | 28.49 | C |
| ATOM | 1738 | OG | SER | A | 336 | 41.107 | 15.491 | 28.485 | 1.00 | 27.98 | O |
| ATOM | 1740 | C | SER | A | 336 | 39.981 | 15.163 | 31.063 | 1.00 | 28.83 | C |
| ATOM | 1741 | O | SER | A | 336 | 40.824 | 14.420 | 31.552 | 1.00 | 28.78 | O |
| ATOM | 1742 | N | LYS | A | 337 | 38.695 | 14.839 | 30.934 | 1.00 | 28.88 | N |
| ATOM | 1744 | CA | LYS | A | 337 | 38.168 | 13.519 | 31.298 | 1.00 | 28.86 | C |
| ATOM | 1746 | CB | LYS | A | 337 | 36.742 | 13.336 | 30.764 | 1.00 | 28.93 | C |
| ATOM | 1749 | CG | LYS | A | 337 | 35.739 | 12.823 | 31.796 | 1.00 | 30.85 | C |
| ATOM | 1752 | CD | LYS | A | 337 | 34.407 | 12.361 | 31.151 | 1.00 | 32.64 | C |
| ATOM | 1755 | CE | LYS | A | 337 | 33.456 | 13.529 | 30.806 | 1.00 | 33.98 | C |
| ATOM | 1758 | NZ | LYS | A | 337 | 32.125 | 13.458 | 31.537 | 1.00 | 35.47 | N |
| ATOM | 1762 | C | LYS | A | 337 | 39.053 | 12.385 | 30.776 | 1.00 | 28.68 | C |
| ATOM | 1763 | O | LYS | A | 337 | 39.286 | 11.404 | 31.492 | 1.00 | 28.62 | O |
| ATOM | 1764 | N | ASP | A | 338 | 39.537 | 12.524 | 29.536 | 1.00 | 28.16 | N |
| ATOM | 1766 | CA | ASP | A | 338 | 40.370 | 11.496 | 28.921 | 1.00 | 27.94 | C |
| ATOM | 1768 | CB | ASP | A | 338 | 40.661 | 11.800 | 27.435 | 1.00 | 28.12 | C |
| ATOM | 1771 | CG | ASP | A | 338 | 39.498 | 11.428 | 26.502 | 1.00 | 28.23 | C |
| ATOM | 1772 | OD1 | ASP | A | 338 | 38.407 | 11.062 | 26.993 | 1.00 | 28.81 | O |
| ATOM | 1773 | OD2 | ASP | A | 338 | 39.585 | 11.489 | 25.256 | 1.00 | 27.66 | O |
| ATOM | 1774 | C | ASP | A | 338 | 41.679 | 11.352 | 29.690 | 1.00 | 27.53 | C |
| ATOM | 1775 | O | ASP | A | 338 | 42.093 | 10.237 | 30.009 | 1.00 | 27.27 | O |
| ATOM | 1776 | N | ASP | A | 339 | 42.324 | 12.478 | 29.990 | 1.00 | 26.98 | N |
| ATOM | 1778 | CA | ASP | A | 339 | 43.580 | 12.449 | 30.743 | 1.00 | 26.51 | C |
| ATOM | 1780 | CB | ASP | A | 339 | 44.098 | 13.864 | 31.040 | 1.00 | 26.35 | C |

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ATOM  1783  CG  ASP A 339    44.531 14.617 29.784 1.00 26.67      C
ATOM  1784  OD1 ASP A 339    45.108 14.010 28.844 1.00 27.93      O
ATOM  1785  OD2 ASP A 339    44.339 15.837 29.650 1.00 26.18      O
ATOM  1786  C   ASP A 339    43.463 11.634 32.040 1.00 26.10      C
ATOM  1787  O   ASP A 339    44.391 10.906 32.392 1.00 26.08      O
ATOM  1788  N   PHE A 340    42.328 11.725 32.732 1.00 25.51      N
ATOM  1790  CA  PHE A 340    42.149 10.965 33.964 1.00 25.32      C
ATOM  1792  CB  PHE A 340    40.967 11.492 34.795 1.00 24.90      C
ATOM  1795  CG  PHE A 340    41.175 12.888 35.305 1.00 22.96      C
ATOM  1796  CD1 PHE A 340    40.553 13.966 34.697 1.00 22.02      C
ATOM  1798  CE1 PHE A 340    40.758 15.257 35.153 1.00 22.03      C
ATOM  1800  CZ  PHE A 340    41.598 15.487 36.229 1.00 20.58      C
ATOM  1802  CE2 PHE A 340    42.226 14.421 36.839 1.00 20.74      C
ATOM  1804  CD2 PHE A 340    42.016 13.128 36.371 1.00 21.10      C
ATOM  1806  C   PHE A 340    42.022  9.466 33.682 1.00 25.66      C
ATOM  1807  O   PHE A 340    42.466  8.650 34.483 1.00 25.91      O
ATOM  1808  N   HIS A 341    41.435  9.106 32.550 1.00 26.18      N
ATOM  1810  CA  HIS A 341    41.343  7.700 32.148 1.00 26.87      C
ATOM  1812  CB  HIS A 341    40.295  7.513 31.045 1.00 27.05      C
ATOM  1815  CG  HIS A 341    39.884  6.085 30.849 1.00 28.71      C
ATOM  1816  ND1 HIS A 341    39.126  5.394 31.771 1.00 29.94      N
ATOM  1818  CE1 HIS A 341    38.922  4.162 31.335 1.00 31.00      C
ATOM  1820  NE2 HIS A 341    39.523  4.027 30.165 1.00 30.91      N
ATOM  1822  CD2 HIS A 341    40.134  5.215 29.838 1.00 30.45      C
ATOM  1824  C   HIS A 341    42.684  7.113 31.685 1.00 26.76      C
ATOM  1825  O   HIS A 341    42.984  5.947 31.954 1.00 26.77      O
ATOM  1826  N   ARG A 342    43.486  7.925 31.003 1.00 26.70      N
ATOM  1828  CA  ARG A 342    44.794  7.493 30.513 1.00 26.94      C
ATOM  1830  CB  ARG A 342    45.382  8.543 29.558 1.00 26.90      C
ATOM  1833  CG  ARG A 342    44.664  8.622 28.210 1.00 28.19      C
ATOM  1836  CD  ARG A 342    45.229  9.672 27.226 1.00 29.91      C
ATOM  1839  NE  ARG A 342    44.476 10.935 27.264 1.00 31.33      N
ATOM  1841  CZ  ARG A 342    44.632 11.955 26.412 1.00 31.59      C
ATOM  1842  NH1 ARG A 342    45.525 11.902 25.427 1.00 31.20      N
ATOM  1845  NH2 ARG A 342    43.886 13.049 26.554 1.00 31.62      N
ATOM  1848  C   ARG A 342    45.778  7.202 31.656 1.00 26.76      C
ATOM  1849  O   ARG A 342    46.798  6.566 31.423 1.00 26.70      O
ATOM  1850  N   ALA A 343    45.470  7.675 32.872 1.00 26.62      N
ATOM  1852  CA  ALA A 343    46.280  7.431 34.079 1.00 26.39      C
ATOM  1854  CB  ALA A 343    46.349  8.695 34.939 1.00 26.48      C
ATOM  1858  C   ALA A 343    45.776  6.249 34.924 1.00 26.40      C
ATOM  1859  O   ALA A 343    46.353  5.932 35.966 1.00 26.25      O
ATOM  1860  N   GLY A 344    44.691  5.620 34.481 1.00 26.50      N
ATOM  1862  CA  GLY A 344    44.267  4.332 35.001 1.00 26.55      C
ATOM  1865  C   GLY A 344    43.280  4.423 36.136 1.00 26.67      C
ATOM  1866  O   GLY A 344    43.183  3.504 36.951 1.00 27.06      O
ATOM  1867  N   LEU A 345    42.551  5.530 36.197 1.00 26.53      N
ATOM  1869  CA  LEU A 345    41.463  5.667 37.153 1.00 26.53      C
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| ATOM | 1871 | CB  | LEU A 345 | 41.267 | 7.149  | 37.516 | 1.00 26.53 | C |
|------|------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 1874 | CG  | LEU A 345 | 42.518 | 7.858  | 38.072 | 1.00 24.62 | C |
| ATOM | 1876 | CD1 | LEU A 345 | 42.305 | 9.352  | 38.144 | 1.00 24.46 | C |
| ATOM | 1880 | CD2 | LEU A 345 | 42.897 | 7.335  | 39.436 | 1.00 23.50 | C |
| ATOM | 1884 | C   | LEU A 345 | 40.181 | 5.026  | 36.586 | 1.00 26.63 | C |
| ATOM | 1885 | O   | LEU A 345 | 39.898 | 5.147  | 35.395 | 1.00 26.63 | O |
| ATOM | 1886 | N   | GLN A 346 | 39.454 | 4.294  | 37.434 | 1.00 26.91 | N |
| ATOM | 1888 | CA  | GLN A 346 | 38.105 | 3.792  | 37.127 | 1.00 26.83 | C |
| ATOM | 1890 | CB  | GLN A 346 | 37.339 | 3.473  | 38.426 | 1.00 27.27 | C |
| ATOM | 1893 | CG  | GLN A 346 | 37.770 | 2.240  | 39.251 | 1.00 28.32 | C |
| ATOM | 1896 | CD  | GLN A 346 | 36.835 | 1.986  | 40.479 | 1.00 29.29 | C |
| ATOM | 1897 | OE1 | GLN A 346 | 36.459 | 0.842  | 40.753 | 1.00 31.84 | O |
| ATOM | 1898 | NE2 | GLN A 346 | 36.460 | 3.046  | 41.182 | 1.00 27.17 | N |
| ATOM | 1901 | C   | GLN A 346 | 37.288 | 4.867  | 36.416 | 1.00 26.31 | C |
| ATOM | 1902 | O   | GLN A 346 | 37.438 | 6.055  | 36.704 | 1.00 26.77 | O |
| ATOM | 1903 | N   | VAL A 347 | 36.389 | 4.454  | 35.536 | 1.00 25.81 | N |
| ATOM | 1905 | CA  | VAL A 347 | 35.368 | 5.358  | 34.976 | 1.00 25.38 | C |
| ATOM | 1907 | CB  | VAL A 347 | 34.753 | 4.766  | 33.669 | 1.00 25.51 | C |
| ATOM | 1909 | CG1 | VAL A 347 | 33.790 | 5.742  | 32.998 | 1.00 25.31 | C |
| ATOM | 1913 | CG2 | VAL A 347 | 35.874 | 4.396  | 32.704 | 1.00 25.57 | C |
| ATOM | 1917 | C   | VAL A 347 | 34.304 | 5.642  | 36.057 | 1.00 24.93 | C |
| ATOM | 1918 | O   | VAL A 347 | 33.792 | 6.757  | 36.161 | 1.00 23.88 | O |
| ATOM | 1919 | N   | GLU A 348 | 34.045 | 4.636  | 36.898 | 1.00 24.60 | N |
| ATOM | 1921 | CA  | GLU A 348 | 33.146 | 4.756  | 38.063 | 1.00 24.72 | C |
| ATOM | 1923 | CB  | GLU A 348 | 33.019 | 3.390  | 38.770 | 1.00 24.91 | C |
| ATOM | 1926 | CG  | GLU A 348 | 32.539 | 2.243  | 37.885 | 1.00 26.71 | C |
| ATOM | 1929 | CD  | GLU A 348 | 33.685 | 1.488  | 37.206 | 1.00 29.71 | C |
| ATOM | 1930 | OE1 | GLU A 348 | 33.582 | 1.233  | 35.991 | 1.00 31.00 | O |
| ATOM | 1931 | OE2 | GLU A 348 | 34.701 | 1.160  | 37.869 | 1.00 31.93 | O |
| ATOM | 1932 | C   | GLU A 348 | 33.583 | 5.808  | 39.107 | 1.00 23.86 | C |
| ATOM | 1933 | O   | GLU A 348 | 32.829 | 6.137  | 40.029 | 1.00 23.87 | O |
| ATOM | 1934 | N   | PHE A 349 | 34.816 | 6.285  | 38.974 | 1.00 23.14 | N |
| ATOM | 1936 | CA  | PHE A 349 | 35.403 | 7.307  | 39.840 | 1.00 22.80 | C |
| ATOM | 1938 | CB  | PHE A 349 | 36.854 | 6.903  | 40.134 | 1.00 23.01 | C |
| ATOM | 1941 | CG  | PHE A 349 | 37.583 | 7.793  | 41.085 | 1.00 22.39 | C |
| ATOM | 1942 | CD1 | PHE A 349 | 37.088 | 8.050  | 42.350 | 1.00 22.17 | C |
| ATOM | 1944 | CE1 | PHE A 349 | 37.780 | 8.853  | 43.218 | 1.00 20.60 | C |
| ATOM | 1946 | CZ  | PHE A 349 | 39.013 | 9.375  | 42.856 | 1.00 21.91 | C |
| ATOM | 1948 | CE2 | PHE A 349 | 39.533 | 9.127  | 41.614 | 1.00 22.28 | C |
| ATOM | 1950 | CD2 | PHE A 349 | 38.818 | 8.336  | 40.726 | 1.00 23.79 | C |
| ATOM | 1952 | C   | PHE A 349 | 35.371 | 8.639  | 39.116 | 1.00 22.30 | C |
| ATOM | 1953 | O   | PHE A 349 | 34.953 | 9.628  | 39.669 | 1.00 21.90 | O |
| ATOM | 1954 | N   | ILE A 350 | 35.796 | 8.635  | 37.857 | 1.00 22.24 | N |
| ATOM | 1956 | CA  | ILE A 350 | 35.895 | 9.848  | 37.060 | 1.00 22.04 | C |
| ATOM | 1958 | CB  | ILE A 350 | 36.575 | 9.537  | 35.722 | 1.00 21.70 | C |
| ATOM | 1960 | CG1 | ILE A 350 | 38.079 | 9.313  | 35.922 | 1.00 22.13 | C |
| ATOM | 1963 | CD1 | ILE A 350 | 38.756 | 8.515  | 34.775 | 1.00 21.47 | C |
| ATOM | 1967 | CG2 | ILE A 350 | 36.332 | 10.663 | 34.718 | 1.00 21.28 | C |

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ATOM  1971  C   ILE A 350    34.558 10.515 36.782 1.00 22.33        C
ATOM  1972  O   ILE A 350    34.434 11.731 36.887 1.00 22.59        O
ATOM  1973  N   ASN A 351    33.572  9.732 36.358 1.00 22.84        N
ATOM  1975  CA  ASN A 351    32.302 10.302 35.907 1.00 22.42        C
ATOM  1977  CB  ASN A 351    31.433  9.243 35.211 1.00 22.60        C
ATOM  1980  CG  ASN A 351    31.905  8.937 33.789 1.00 23.53        C
ATOM  1981  OD1 ASN A 351    32.687  9.687 33.203 1.00 25.37        O
ATOM  1982  ND2 ASN A 351    31.424  7.836 33.232 1.00 23.29        N
ATOM  1985  C   ASN A 351    31.558 11.005 37.045 1.00 22.06        C
ATOM  1986  O   ASN A 351    31.069 12.114 36.843 1.00 22.38        O
ATOM  1987  N   PRO A 352    31.464 10.388 38.228 1.00 21.48        N
ATOM  1988  CA  PRO A 352    30.887 11.074 39.397 1.00 20.83        C
ATOM  1990  CB  PRO A 352    30.914 10.006 40.491 1.00 20.76        C
ATOM  1993  CG  PRO A 352    30.930  8.732 39.765 1.00 21.63        C
ATOM  1996  CD  PRO A 352    31.813  8.990 38.550 1.00 21.39        C
ATOM  1999  C   PRO A 352    31.645 12.322 39.856 1.00 20.50        C
ATOM  2000  O   PRO A 352    30.977 13.206 40.375 1.00 19.87        O
ATOM  2001  N   ILE A 353    32.966 12.412 39.672 1.00 19.96        N
ATOM  2003  CA  ILE A 353    33.689 13.627 40.076 1.00 19.92        C
ATOM  2005  CB  ILE A 353    35.236 13.428 40.135 1.00 19.61        C
ATOM  2007  CG1 ILE A 353    35.686 12.406 41.190 1.00 20.31        C
ATOM  2010  CD1 ILE A 353    34.657 11.997 42.210 1.00 22.76        C
ATOM  2014  CG2 ILE A 353    35.906 14.762 40.367 1.00 19.04        C
ATOM  2018  C   ILE A 353    33.379 14.758 39.099 1.00 19.71        C
ATOM  2019  O   ILE A 353    33.261 15.903 39.505 1.00 19.66        O
ATOM  2020  N   PHE A 354    33.280 14.435 37.812 1.00 19.64        N
ATOM  2022  CA  PHE A 354    32.886 15.431 36.785 1.00 19.92        C
ATOM  2024  CB  PHE A 354    33.175 14.938 35.370 1.00 19.71        C
ATOM  2027  CG  PHE A 354    34.513 15.328 34.876 1.00 20.80        C
ATOM  2028  CD1 PHE A 354    35.625 14.553 35.182 1.00 23.54        C
ATOM  2030  CE1 PHE A 354    36.896 14.919 34.739 1.00 24.39        C
ATOM  2032  CZ  PHE A 354    37.056 16.066 33.983 1.00 24.23        C
ATOM  2034  CE2 PHE A 354    35.946 16.849 33.685 1.00 23.89        C
ATOM  2036  CD2 PHE A 354    34.685 16.477 34.140 1.00 22.42        C
ATOM  2038  C   PHE A 354    31.424 15.884 36.877 1.00 19.67        C
ATOM  2039  O   PHE A 354    31.126 17.052 36.613 1.00 19.35        O
ATOM  2040  N   GLU A 355    30.541 14.976 37.286 1.00 19.54        N
ATOM  2042  CA  GLU A 355    29.141 15.314 37.550 1.00 19.97        C
ATOM  2044  CB  GLU A 355    28.337 14.053 37.852 1.00 20.00        C
ATOM  2047  CG  GLU A 355    27.688 13.441 36.635 1.00 22.53        C
ATOM  2050  CD  GLU A 355    27.848 11.929 36.543 1.00 26.22        C
ATOM  2051  OE1 GLU A 355    27.853 11.411 35.386 1.00 26.82        O
ATOM  2052  OE2 GLU A 355    27.946 11.267 37.610 1.00 27.50        O
ATOM  2053  C   GLU A 355    29.036 16.284 38.734 1.00 19.93        C
ATOM  2054  O   GLU A 355    28.311 17.264 38.684 1.00 19.80        O
ATOM  2055  N   PHE A 356    29.794 16.011 39.785 1.00 19.56        N
ATOM  2057  CA  PHE A 356    29.799 16.853 40.966 1.00 19.66        C
ATOM  2059  CB  PHE A 356    30.591 16.167 42.081 1.00 19.44        C
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ATOM  2062  CG  PHE A 356    30.659 16.955 43.348 1.00 20.91        C
ATOM  2063  CD1 PHE A 356    29.577 16.978 44.223 1.00 20.43        C
ATOM  2065  CE1 PHE A 356    29.647 17.694 45.404 1.00 19.47        C
ATOM  2067  CZ  PHE A 356    30.809 18.396 45.720 1.00 18.74        C
ATOM  2069  CE2 PHE A 356    31.881 18.384 44.855 1.00 19.01        C
ATOM  2071  CD2 PHE A 356    31.811 17.672 43.678 1.00 19.31        C
ATOM  2073  C   PHE A 356    30.373 18.223 40.625 1.00 19.40        C
ATOM  2074  O   PHE A 356    29.825 19.225 40.990 1.00 18.28        O
ATOM  2075  N   SER A 357    31.457 18.249 39.870 1.00 20.60        N
ATOM  2077  CA  SER A 357    32.128 19.499 39.503 1.00 20.59        C
ATOM  2079  CB  SER A 357    33.338 19.227 38.602 1.00 20.29        C
ATOM  2082  OG  SER A 357    34.369 18.580 39.329 1.00 20.02        O
ATOM  2084  C   SER A 357    31.194 20.445 38.806 1.00 20.65        C
ATOM  2085  O   SER A 357    31.099 21.606 39.160 1.00 21.92        O
ATOM  2086  N   ARG A 358    30.488 19.958 37.815 1.00 21.00        N
ATOM  2088  CA  ARG A 358    29.605 20.841 37.041 1.00 21.25        C
ATOM  2090  CB  ARG A 358    29.238 20.203 35.708 1.00 21.20        C
ATOM  2093  CG  ARG A 358    28.561 18.881 35.802 1.00 22.25        C
ATOM  2096  CD  ARG A 358    28.071 18.403 34.441 1.00 23.15        C
ATOM  2099  NE  ARG A 358    29.192 17.895 33.667 1.00 23.60        N
ATOM  2101  CZ  ARG A 358    29.508 16.607 33.533 1.00 26.50        C
ATOM  2102  NH1 ARG A 358    28.770 15.650 34.106 1.00 26.64        N
ATOM  2105  NH2 ARG A 358    30.558 16.272 32.783 1.00 28.29        N
ATOM  2108  C   ARG A 358    28.361 21.285 37.816 1.00 21.19        C
ATOM  2109  O   ARG A 358    27.888 22.421 37.655 1.00 20.90        O
ATOM  2110  N   ALA A 359    27.845 20.399 38.664 1.00 21.30        N
ATOM  2112  CA  ALA A 359    26.770 20.738 39.595 1.00 21.67        C
ATOM  2114  CB  ALA A 359    26.329 19.479 40.375 1.00 21.76        C
ATOM  2118  C   ALA A 359    27.213 21.831 40.576 1.00 22.18        C
ATOM  2119  O   ALA A 359    26.457 22.711 40.925 1.00 21.77        O
ATOM  2120  N   MET A 360    28.457 21.767 41.001 1.00 23.01        N
ATOM  2122  CA  MET A 360    29.009 22.748 41.919 1.00 24.64        C
ATOM  2124  CB  MET A 360    30.361 22.254 42.446 1.00 24.59        C
ATOM  2127  CG  MET A 360    30.641 22.625 43.881 1.00 27.53        C
ATOM  2130  SD  MET A 360    29.338 22.222 45.065 1.00 26.30        S
ATOM  2131  CE  MET A 360    29.857 20.934 45.508 1.00 30.19        C
ATOM  2135  C   MET A 360    29.148 24.121 41.258 1.00 25.19        C
ATOM  2136  O   MET A 360    28.926 25.162 41.894 1.00 25.74        O
ATOM  2137  N   ARG A 361    29.480 24.126 39.972 1.00 25.84        N
ATOM  2139  CA  ARG A 361    29.584 25.371 39.224 1.00 26.35        C
ATOM  2141  CB  ARG A 361    30.249 25.117 37.869 1.00 27.12        C
ATOM  2144  CG  ARG A 361    31.701 24.623 37.971 1.00 29.89        C
ATOM  2147  CD  ARG A 361    32.662 25.573 38.673 1.00 31.97        C
ATOM  2150  NE  ARG A 361    33.039 26.712 37.829 1.00 33.46        N
ATOM  2152  CZ  ARG A 361    33.860 27.693 38.219 1.00 35.94        C
ATOM  2153  NH1 ARG A 361    34.416 27.690 39.435 1.00 36.21        N
ATOM  2156  NH2 ARG A 361    34.127 28.692 37.390 1.00 37.44        N
ATOM  2159  C   ARG A 361    28.239 26.054 38.996 1.00 26.11        C
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ATOM  2160 O   ARG A 361   28.179 27.284 38.839 1.00 26.26      O
ATOM  2161 N   ARG A 362   27.159 25.276 38.939 1.00 25.48      N
ATOM  2163 CA  ARG A 362   25.834 25.863 38.729 1.00 25.07      C
ATOM  2165 CB  ARG A 362   24.771 24.804 38.378 1.00 25.05      C
ATOM  2168 CG  ARG A 362   24.727 24.487 36.901 1.00 26.61      C
ATOM  2171 CD  ARG A 362   23.614 23.522 36.494 1.00 30.55      C
ATOM  2174 NE  ARG A 362   24.090 22.127 36.484 1.00 33.30      N
ATOM  2176 CZ  ARG A 362   23.737 21.173 37.352 1.00 33.74      C
ATOM  2177 NH1 ARG A 362   22.882 21.411 38.352 1.00 34.38      N
ATOM  2180 NH2 ARG A 362   24.258 19.964 37.220 1.00 33.96      N
ATOM  2183 C   ARG A 362   25.467 26.641 39.971 1.00 24.29      C
ATOM  2184 O   ARG A 362   24.923 27.726 39.888 1.00 24.82      O
ATOM  2185 N   LEU A 363   25.813 26.093 41.126 1.00 24.09      N
ATOM  2187 CA  LEU A 363   25.515 26.735 42.390 1.00 23.70      C
ATOM  2189 CB  LEU A 363   25.927 25.841 43.562 1.00 24.14      C
ATOM  2192 CG  LEU A 363   24.872 25.174 44.445 1.00 25.78      C
ATOM  2194 CD1 LEU A 363   25.540 24.801 45.755 1.00 26.68      C
ATOM  2198 CD2 LEU A 363   23.653 26.039 44.721 1.00 26.04      C
ATOM  2202 C   LEU A 363   26.223 28.081 42.502 1.00 22.89      C
ATOM  2203 O   LEU A 363   25.760 28.946 43.218 1.00 22.75      O
ATOM  2204 N   GLY A 364   27.355 28.251 41.826 1.00 22.35      N
ATOM  2206 CA  GLY A 364   28.092 29.509 41.865 1.00 21.60      C
ATOM  2209 C   GLY A 364   28.424 30.050 43.262 1.00 20.93      C
ATOM  2210 O   GLY A 364   28.151 31.187 43.573 1.00 20.48      O
ATOM  2211 N   LEU A 365   29.015 29.239 44.112 1.00 20.65      N
ATOM  2213 CA  LEU A 365   29.409 29.712 45.439 1.00 20.77      C
ATOM  2215 CB  LEU A 365   29.970 28.563 46.257 1.00 20.89      C
ATOM  2218 CG  LEU A 365   29.053 27.368 46.534 1.00 21.09      C
ATOM  2220 CD1 LEU A 365   29.655 26.540 47.624 1.00 23.59      C
ATOM  2224 CD2 LEU A 365   27.722 27.838 46.955 1.00 23.26      C
ATOM  2228 C   LEU A 365   30.449 30.830 45.348 1.00 20.31      C
ATOM  2229 O   LEU A 365   31.290 30.801 44.466 1.00 20.83      O
ATOM  2230 N   ASP A 366   30.390 31.819 46.241 1.00 19.34      N
ATOM  2232 CA  ASP A 366   31.450 32.813 46.304 1.00 18.83      C
ATOM  2234 CB  ASP A 366   30.904 34.235 46.543 1.00 18.87      C
ATOM  2237 CG  ASP A 366   30.328 34.442 47.922 1.00 19.79      C
ATOM  2238 OD1 ASP A 366   30.648 33.664 48.849 1.00 22.64      O
ATOM  2239 OD2 ASP A 366   29.547 35.383 48.175 1.00 18.75      O
ATOM  2240 C   ASP A 366   32.511 32.369 47.311 1.00 18.05      C
ATOM  2241 O   ASP A 366   32.373 31.318 47.902 1.00 17.47      O
ATOM  2242 N   ASP A 367   33.577 33.145 47.458 1.00 18.22      N
ATOM  2244 CA  ASP A 367   34.732 32.766 48.286 1.00 18.77      C
ATOM  2246 CB  ASP A 367   35.792 33.879 48.276 1.00 19.56      C
ATOM  2249 CG  ASP A 367   36.570 33.986 46.950 1.00 21.86      C
ATOM  2250 OD1 ASP A 367   36.252 33.299 45.969 1.00 26.50      O
ATOM  2251 OD2 ASP A 367   37.556 34.750 46.808 1.00 29.03      O
ATOM  2252 C   ASP A 367   34.328 32.482 49.740 1.00 18.55      C
ATOM  2253 O   ASP A 367   34.810 31.527 50.340 1.00 18.77      O
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| ATOM | 2254 | N | ALA | A | 368 | 33.436 | 33.304 | 50.291 | 1.00 | 17.60 | N |
| ATOM | 2256 | CA | ALA | A | 368 | 32.965 | 33.127 | 51.656 | 1.00 | 17.92 | C |
| ATOM | 2258 | CB | ALA | A | 368 | 32.127 | 34.347 | 52.106 | 1.00 | 17.88 | C |
| ATOM | 2262 | C | ALA | A | 368 | 32.145 | 31.847 | 51.823 | 1.00 | 17.92 | C |
| ATOM | 2263 | O | ALA | A | 368 | 32.291 | 31.149 | 52.819 | 1.00 | 17.06 | O |
| ATOM | 2264 | N | GLU | A | 369 | 31.273 | 31.572 | 50.848 | 1.00 | 17.90 | N |
| ATOM | 2266 | CA | GLU | A | 369 | 30.428 | 30.393 | 50.849 | 1.00 | 17.89 | C |
| ATOM | 2268 | CB | GLU | A | 369 | 29.392 | 30.448 | 49.719 | 1.00 | 17.89 | C |
| ATOM | 2271 | CG | GLU | A | 369 | 28.197 | 31.315 | 50.072 | 1.00 | 17.84 | C |
| ATOM | 2274 | CD | GLU | A | 369 | 27.368 | 31.747 | 48.887 | 1.00 | 17.92 | C |
| ATOM | 2275 | OE1 | GLU | A | 369 | 26.183 | 32.053 | 49.081 | 1.00 | 19.99 | O |
| ATOM | 2276 | OE2 | GLU | A | 369 | 27.877 | 31.780 | 47.764 | 1.00 | 16.22 | O |
| ATOM | 2277 | C | GLU | A | 369 | 31.273 | 29.120 | 50.784 | 1.00 | 17.98 | C |
| ATOM | 2278 | O | GLU | A | 369 | 31.062 | 28.239 | 51.611 | 1.00 | 18.41 | O |
| ATOM | 2279 | N | TYR | A | 370 | 32.237 | 29.043 | 49.860 | 1.00 | 17.69 | N |
| ATOM | 2281 | CA | TYR | A | 370 | 33.179 | 27.919 | 49.811 | 1.00 | 18.46 | C |
| ATOM | 2283 | CB | TYR | A | 370 | 34.263 | 28.083 | 48.713 | 1.00 | 19.44 | C |
| ATOM | 2286 | CG | TYR | A | 370 | 33.924 | 27.365 | 47.453 | 1.00 | 23.14 | C |
| ATOM | 2287 | CD1 | TYR | A | 370 | 33.476 | 28.072 | 46.322 | 1.00 | 30.57 | C |
| ATOM | 2289 | CE1 | TYR | A | 370 | 33.109 | 27.405 | 45.129 | 1.00 | 31.46 | C |
| ATOM | 2291 | CZ | TYR | A | 370 | 33.183 | 26.031 | 45.089 | 1.00 | 30.45 | C |
| ATOM | 2292 | OH | TYR | A | 370 | 32.856 | 25.383 | 43.933 | 1.00 | 34.50 | O |
| ATOM | 2294 | CE2 | TYR | A | 370 | 33.619 | 25.317 | 46.197 | 1.00 | 29.61 | C |
| ATOM | 2296 | CD2 | TYR | A | 370 | 34.001 | 25.994 | 47.374 | 1.00 | 25.53 | C |
| ATOM | 2298 | C | TYR | A | 370 | 33.898 | 27.711 | 51.121 | 1.00 | 18.02 | C |
| ATOM | 2299 | O | TYR | A | 370 | 33.884 | 26.603 | 51.653 | 1.00 | 18.12 | O |
| ATOM | 2300 | N | ALA | A | 371 | 34.570 | 28.759 | 51.604 | 1.00 | 17.46 | N |
| ATOM | 2302 | CA | ALA | A | 371 | 35.332 | 28.705 | 52.860 | 1.00 | 17.72 | C |
| ATOM | 2304 | CB | ALA | A | 371 | 35.915 | 30.075 | 53.187 | 1.00 | 17.37 | C |
| ATOM | 2308 | C | ALA | A | 371 | 34.483 | 28.192 | 54.030 | 1.00 | 17.86 | C |
| ATOM | 2309 | O | ALA | A | 371 | 34.867 | 27.264 | 54.744 | 1.00 | 17.61 | O |
| ATOM | 2310 | N | LEU | A | 372 | 33.300 | 28.770 | 54.184 | 1.00 | 18.15 | N |
| ATOM | 2312 | CA | LEU | A | 372 | 32.379 | 28.367 | 55.235 | 1.00 | 18.10 | C |
| ATOM | 2314 | CB | LEU | A | 372 | 31.168 | 29.301 | 55.288 | 1.00 | 18.44 | C |
| ATOM | 2317 | CG | LEU | A | 372 | 31.388 | 30.655 | 55.966 | 1.00 | 17.97 | C |
| ATOM | 2319 | CD1 | LEU | A | 372 | 30.261 | 31.616 | 55.581 | 1.00 | 18.92 | C |
| ATOM | 2323 | CD2 | LEU | A | 372 | 31.503 | 30.529 | 57.490 | 1.00 | 17.39 | C |
| ATOM | 2327 | C | LEU | A | 372 | 31.915 | 26.919 | 55.066 | 1.00 | 18.84 | C |
| ATOM | 2328 | O | LEU | A | 372 | 31.794 | 26.203 | 56.054 | 1.00 | 18.91 | O |
| ATOM | 2329 | N | LEU | A | 373 | 31.675 | 26.473 | 53.839 | 1.00 | 19.14 | N |
| ATOM | 2331 | CA | LEU | A | 373 | 31.293 | 25.074 | 53.601 | 1.00 | 19.70 | C |
| ATOM | 2333 | CB | LEU | A | 373 | 31.049 | 24.809 | 52.126 | 1.00 | 19.70 | C |
| ATOM | 2336 | CG | LEU | A | 373 | 29.782 | 24.100 | 51.665 | 1.00 | 21.26 | C |
| ATOM | 2338 | CD1 | LEU | A | 373 | 30.074 | 23.402 | 50.324 | 1.00 | 22.41 | C |
| ATOM | 2342 | CD2 | LEU | A | 373 | 29.130 | 23.141 | 52.650 | 1.00 | 20.53 | C |
| ATOM | 2346 | C | LEU | A | 373 | 32.383 | 24.129 | 54.043 | 1.00 | 20.13 | C |
| ATOM | 2347 | O | LEU | A | 373 | 32.129 | 23.098 | 54.647 | 1.00 | 20.93 | O |
| ATOM | 2348 | N | ILE | A | 374 | 33.614 | 24.476 | 53.736 | 1.00 | 20.60 | N |

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ATOM  2350 CA  ILE A 374    34.753 23.657 54.113 1.00 20.44      C
ATOM  2352 CB  ILE A 374    36.018 24.226 53.480 1.00 20.73      C
ATOM  2354 CG1 ILE A 374    36.007 23.898 51.988 1.00 20.20      C
ATOM  2357 CD1 ILE A 374    37.030 24.646 51.130 1.00 20.32      C
ATOM  2361 CG2 ILE A 374    37.272 23.623 54.158 1.00 23.14      C
ATOM  2365 C   ILE A 374    34.890 23.516 55.626 1.00 20.57      C
ATOM  2366 O   ILE A 374    35.044 22.411 56.116 1.00 22.25      O
ATOM  2367 N   ALA A 375    34.835 24.615 56.374 1.00 20.16      N
ATOM  2369 CA  ALA A 375    34.859 24.573 57.829 1.00 19.27      C
ATOM  2371 CB  ALA A 375    34.780 25.972 58.370 1.00 19.60      C
ATOM  2375 C   ALA A 375    33.705 23.743 58.391 1.00 19.34      C
ATOM  2376 O   ALA A 375    33.849 23.045 59.387 1.00 19.63      O
ATOM  2377 N   ILE A 376    32.540 23.828 57.767 1.00 19.42      N
ATOM  2379 CA  ILE A 376    31.390 23.066 58.227 1.00 18.80      C
ATOM  2381 CB  ILE A 376    30.092 23.502 57.515 1.00 17.92      C
ATOM  2383 CG1 ILE A 376    29.576 24.820 58.079 1.00 17.49      C
ATOM  2386 CD1 ILE A 376    28.585 25.567 57.139 1.00 16.73      C
ATOM  2390 CG2 ILE A 376    28.994 22.466 57.695 1.00 19.11      C
ATOM  2394 C   ILE A 376    31.683 21.603 57.971 1.00 19.50      C
ATOM  2395 O   ILE A 376    31.306 20.773 58.774 1.00 20.11      O
ATOM  2396 N   ASN A 377    32.336 21.294 56.847 1.00 20.52      N
ATOM  2398 CA  ASN A 377    32.680 19.915 56.469 1.00 20.93      C
ATOM  2400 CB  ASN A 377    33.307 19.872 55.085 1.00 21.62      C
ATOM  2403 CG  ASN A 377    33.690 18.453 54.641 1.00 22.72      C
ATOM  2404 OD1 ASN A 377    32.979 17.837 53.867 1.00 22.99      O
ATOM  2405 ND2 ASN A 377    34.812 17.947 55.141 1.00 20.87      N
ATOM  2408 C   ASN A 377    33.671 19.331 57.433 1.00 21.11      C
ATOM  2409 O   ASN A 377    33.517 18.205 57.869 1.00 21.98      O
ATOM  2410 N   ILE A 378    34.672 20.121 57.783 1.00 21.41      N
ATOM  2412 CA  ILE A 378    35.681 19.716 58.758 1.00 21.93      C
ATOM  2414 CB  ILE A 378    36.697 20.853 58.960 1.00 21.86      C
ATOM  2416 CG1 ILE A 378    37.633 20.936 57.757 1.00 21.82      C
ATOM  2419 CD1 ILE A 378    38.474 22.216 57.746 1.00 23.11      C
ATOM  2423 CG2 ILE A 378    37.536 20.629 60.215 1.00 23.23      C
ATOM  2427 C   ILE A 378    35.086 19.287 60.094 1.00 21.90      C
ATOM  2428 O   ILE A 378    35.470 18.250 60.642 1.00 22.53      O
ATOM  2429 N   PHE A 379    34.168 20.086 60.630 1.00 21.90      N
ATOM  2431 CA  PHE A 379    33.632 19.825 61.970 1.00 21.69      C
ATOM  2433 CB  PHE A 379    33.313 21.140 62.711 1.00 21.31      C
ATOM  2436 CG  PHE A 379    34.536 21.991 62.992 1.00 21.12      C
ATOM  2437 CD1 PHE A 379    34.639 23.276 62.499 1.00 21.16      C
ATOM  2439 CE1 PHE A 379    35.771 24.028 62.745 1.00 21.97      C
ATOM  2441 CZ  PHE A 379    36.806 23.504 63.484 1.00 21.44      C
ATOM  2443 CE2 PHE A 379    36.715 22.241 63.981 1.00 19.78      C
ATOM  2445 CD2 PHE A 379    35.587 21.490 63.733 1.00 21.14      C
ATOM  2447 C   PHE A 379    32.398 18.934 61.907 1.00 21.30      C
ATOM  2448 O   PHE A 379    31.353 19.317 62.396 1.00 21.90      O
ATOM  2449 N   SER A 380    32.517 17.758 61.310 1.00 20.97      N
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 2451 | CA | SER A 380 | 31.407 | 16.796 | 61.282 | 1.00 | 21.44 | | C |
| ATOM | 2453 | CB | SER A 380 | 31.307 | 16.061 | 59.944 | 1.00 | 21.03 | | C |
| ATOM | 2456 | OG | SER A 380 | 31.393 | 16.992 | 58.889 | 1.00 | 23.07 | | O |
| ATOM | 2458 | C | SER A 380 | 31.656 | 15.814 | 62.382 | 1.00 | 21.42 | | C |
| ATOM | 2459 | O | SER A 380 | 32.626 | 15.075 | 62.340 | 1.00 | 21.37 | | O |
| ATOM | 2460 | N | ALA A 381 | 30.781 | 15.804 | 63.376 | 1.00 | 22.21 | | N |
| ATOM | 2462 | CA | ALA A 381 | 31.019 | 15.021 | 64.579 | 1.00 | 22.72 | | C |
| ATOM | 2464 | CB | ALA A 381 | 30.066 | 15.461 | 65.667 | 1.00 | 23.12 | | C |
| ATOM | 2468 | C | ALA A 381 | 30.879 | 13.518 | 64.339 | 1.00 | 23.30 | | C |
| ATOM | 2469 | O | ALA A 381 | 31.284 | 12.728 | 65.200 | 1.00 | 24.29 | | O |
| ATOM | 2470 | N | ASP A 382 | 30.309 | 13.117 | 63.195 | 1.00 | 23.11 | | N |
| ATOM | 2472 | CA | ASP A 382 | 30.071 | 11.692 | 62.904 | 1.00 | 23.18 | | C |
| ATOM | 2474 | CB | ASP A 382 | 28.734 | 11.504 | 62.202 | 1.00 | 23.26 | | C |
| ATOM | 2477 | CG | ASP A 382 | 28.698 | 12.110 | 60.819 | 1.00 | 25.57 | | C |
| ATOM | 2478 | OD1 | ASP A 382 | 29.572 | 12.946 | 60.478 | 1.00 | 24.08 | | O |
| ATOM | 2479 | OD2 | ASP A 382 | 27.781 | 11.837 | 60.010 | 1.00 | 29.55 | | O |
| ATOM | 2480 | C | ASP A 382 | 31.180 | 10.986 | 62.111 | 1.00 | 23.20 | | C |
| ATOM | 2481 | O | ASP A 382 | 30.988 | 9.859 | 61.646 | 1.00 | 23.89 | | O |
| ATOM | 2482 | N | ARG A 383 | 32.347 | 11.628 | 61.974 | 1.00 | 22.57 | | N |
| ATOM | 2484 | CA | ARG A 383 | 33.500 | 11.008 | 61.312 | 1.00 | 21.50 | | C |
| ATOM | 2486 | CB | ARG A 383 | 34.667 | 11.995 | 61.218 | 1.00 | 21.27 | | C |
| ATOM | 2489 | CG | ARG A 383 | 34.340 | 13.312 | 60.528 | 1.00 | 21.52 | | C |
| ATOM | 2492 | CD | ARG A 383 | 33.831 | 13.113 | 59.123 | 1.00 | 21.58 | | C |
| ATOM | 2495 | NE | ARG A 383 | 33.970 | 14.264 | 58.250 | 1.00 | 21.75 | | N |
| ATOM | 2497 | CZ | ARG A 383 | 33.653 | 14.244 | 56.958 | 1.00 | 22.05 | | C |
| ATOM | 2498 | NH1 | ARG A 383 | 33.204 | 13.131 | 56.393 | 1.00 | 19.43 | | N |
| ATOM | 2501 | NH2 | ARG A 383 | 33.781 | 15.343 | 56.222 | 1.00 | 23.34 | | N |
| ATOM | 2504 | C | ARG A 383 | 33.936 | 9.810 | 62.129 | 1.00 | 21.13 | | C |
| ATOM | 2505 | O | ARG A 383 | 33.719 | 9.770 | 63.334 | 1.00 | 21.47 | | O |
| ATOM | 2506 | N | PRO A 384 | 34.564 | 8.834 | 61.502 | 1.00 | 20.88 | | N |
| ATOM | 2507 | CA | PRO A 384 | 35.176 | 7.721 | 62.241 | 1.00 | 21.10 | | C |
| ATOM | 2509 | CB | PRO A 384 | 35.890 | 6.914 | 61.146 | 1.00 | 21.32 | | C |
| ATOM | 2512 | CG | PRO A 384 | 35.280 | 7.338 | 59.855 | 1.00 | 21.47 | | C |
| ATOM | 2515 | CD | PRO A 384 | 34.712 | 8.700 | 60.046 | 1.00 | 20.67 | | C |
| ATOM | 2518 | C | PRO A 384 | 36.222 | 8.149 | 63.278 | 1.00 | 21.38 | | C |
| ATOM | 2519 | O | PRO A 384 | 37.054 | 9.026 | 63.002 | 1.00 | 21.60 | | O |
| ATOM | 2520 | N | ASN A 385 | 36.188 | 7.513 | 64.445 | 1.00 | 21.55 | | N |
| ATOM | 2522 | CA | ASN A 385 | 37.226 | 7.665 | 65.488 | 1.00 | 21.22 | | C |
| ATOM | 2524 | CB | ASN A 385 | 38.619 | 7.375 | 64.905 | 1.00 | 21.33 | | C |
| ATOM | 2527 | CG | ASN A 385 | 38.708 | 5.977 | 64.310 | 1.00 | 20.84 | | C |
| ATOM | 2528 | OD1 | ASN A 385 | 38.458 | 5.013 | 65.008 | 1.00 | 22.86 | | O |
| ATOM | 2529 | ND2 | ASN A 385 | 39.017 | 5.867 | 63.026 | 1.00 | 17.53 | | N |
| ATOM | 2532 | C | ASN A 385 | 37.233 | 8.991 | 66.253 | 1.00 | 20.97 | | C |
| ATOM | 2533 | O | ASN A 385 | 38.190 | 9.282 | 66.922 | 1.00 | 20.77 | | O |
| ATOM | 2534 | N | VAL A 386 | 36.158 | 9.774 | 66.177 | 1.00 | 20.83 | | N |
| ATOM | 2536 | CA | VAL A 386 | 36.042 | 10.996 | 66.964 | 1.00 | 20.53 | | C |
| ATOM | 2538 | CB | VAL A 386 | 35.027 | 11.967 | 66.340 | 1.00 | 20.29 | | C |
| ATOM | 2540 | CG1 | VAL A 386 | 34.755 | 13.131 | 67.264 | 1.00 | 20.90 | | C |

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ATOM  2544 CG2 VAL A 386    35.552 12.486 64.983 1.00 20.31      C
ATOM  2548 C   VAL A 386    35.673 10.695 68.430 1.00 20.67      C
ATOM  2549 O   VAL A 386    34.735  9.950 68.720 1.00 20.08      O
ATOM  2550 N   GLN A 387    36.410 11.309 69.344 1.00 20.66      N
ATOM  2552 CA  GLN A 387    36.303 11.018 70.771 1.00 21.25      C
ATOM  2554 CB  GLN A 387    37.668 11.084 71.458 1.00 21.61      C
ATOM  2557 CG  GLN A 387    38.837 10.601 70.615 1.00 23.93      C
ATOM  2560 CD  GLN A 387    39.596  9.483 71.255 1.00 25.34      C
ATOM  2561 OE1 GLN A 387    38.994  8.517 71.705 1.00 29.43      O
ATOM  2562 NE2 GLN A 387    40.924  9.598 71.292 1.00 27.17      N
ATOM  2565 C   GLN A 387    35.391 12.007 71.455 1.00 20.57      C
ATOM  2566 O   GLN A 387    34.745 11.659 72.413 1.00 20.97      O
ATOM  2567 N   GLU A 388    35.335 13.227 70.945 1.00 20.17      N
ATOM  2569 CA  GLU A 388    34.566 14.301 71.551 1.00 20.02      C
ATOM  2571 CB  GLU A 388    35.526 15.372 72.037 1.00 20.38      C
ATOM  2574 CG  GLU A 388    36.601 14.797 72.937 1.00 21.88      C
ATOM  2577 CD  GLU A 388    37.233 15.860 73.794 1.00 24.28      C
ATOM  2578 OE1 GLU A 388    37.975 16.680 73.239 1.00 27.15      O
ATOM  2579 OE2 GLU A 388    36.976 15.885 75.008 1.00 25.68      O
ATOM  2580 C   GLU A 388    33.591 14.868 70.532 1.00 19.21      C
ATOM  2581 O   GLU A 388    33.710 16.011 70.126 1.00 18.78      O
ATOM  2582 N   PRO A 389    32.632 14.056 70.107 1.00 19.33      N
ATOM  2583 CA  PRO A 389    31.691 14.477 69.063 1.00 19.55      C
ATOM  2585 CB  PRO A 389    30.836 13.208 68.812 1.00 20.13      C
ATOM  2588 CG  PRO A 389    30.992 12.348 70.066 1.00 19.37      C
ATOM  2591 CD  PRO A 389    32.374 12.668 70.564 1.00 19.24      C
ATOM  2594 C   PRO A 389    30.838 15.675 69.482 1.00 19.37      C
ATOM  2595 O   PRO A 389    30.576 16.559 68.644 1.00 19.74      O
ATOM  2596 N   GLY A 390    30.420 15.718 70.742 1.00 19.03      N
ATOM  2598 CA  GLY A 390    29.702 16.866 71.267 1.00 18.88      C
ATOM  2601 C   GLY A 390    30.465 18.182 71.091 1.00 19.43      C
ATOM  2602 O   GLY A 390    29.873 19.229 70.755 1.00 19.60      O
ATOM  2603 N   ARG A 391    31.770 18.158 71.346 1.00 19.20      N
ATOM  2605 CA  ARG A 391    32.605 19.344 71.106 1.00 19.79      C
ATOM  2607 CB  ARG A 391    33.995 19.139 71.680 1.00 20.00      C
ATOM  2610 CG  ARG A 391    33.984 18.973 73.171 1.00 23.73      C
ATOM  2613 CD  ARG A 391    35.374 18.976 73.748 1.00 28.60      C
ATOM  2616 NE  ARG A 391    36.026 20.260 73.495 1.00 31.62      N
ATOM  2618 CZ  ARG A 391    37.335 20.439 73.329 1.00 33.77      C
ATOM  2619 NH1 ARG A 391    38.191 19.412 73.360 1.00 33.29      N
ATOM  2622 NH2 ARG A 391    37.788 21.673 73.139 1.00 34.43      N
ATOM  2625 C   ARG A 391    32.737 19.725 69.632 1.00 19.01      C
ATOM  2626 O   ARG A 391    32.721 20.900 69.304 1.00 18.13      O
ATOM  2627 N   VAL A 392    32.890 18.725 68.757 1.00 19.26      N
ATOM  2629 CA  VAL A 392    33.046 18.963 67.328 1.00 19.48      C
ATOM  2631 CB  VAL A 392    33.342 17.673 66.560 1.00 19.79      C
ATOM  2633 CG1 VAL A 392    33.239 17.903 65.035 1.00 19.28      C
ATOM  2637 CG2 VAL A 392    34.711 17.159 66.908 1.00 19.99      C
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| ATOM | 2641 | C | VAL A 392 | 31.777 | 19.603 | 66.769 | 1.00 | 19.62 | C |
| ATOM | 2642 | O | VAL A 392 | 31.831 | 20.535 | 65.999 | 1.00 | 19.42 | O |
| ATOM | 2643 | N | GLU A 393 | 30.642 | 19.100 | 67.198 | 1.00 | 20.52 | N |
| ATOM | 2645 | CA | GLU A 393 | 29.347 | 19.608 | 66.793 | 1.00 | 21.87 | C |
| ATOM | 2647 | CB | GLU A 393 | 28.248 | 18.672 | 67.314 | 1.00 | 22.09 | C |
| ATOM | 2650 | CG | GLU A 393 | 26.863 | 19.094 | 66.918 | 1.00 | 25.31 | C |
| ATOM | 2653 | CD | GLU A 393 | 25.910 | 17.906 | 66.851 | 1.00 | 31.55 | C |
| ATOM | 2654 | OE1 | GLU A 393 | 25.791 | 17.278 | 65.761 | 1.00 | 35.01 | O |
| ATOM | 2655 | OE2 | GLU A 393 | 25.299 | 17.600 | 67.889 | 1.00 | 29.86 | O |
| ATOM | 2656 | C | GLU A 393 | 29.106 | 21.018 | 67.326 | 1.00 | 21.32 | C |
| ATOM | 2657 | O | GLU A 393 | 28.547 | 21.851 | 66.618 | 1.00 | 21.71 | O |
| ATOM | 2658 | N | ALA A 394 | 29.513 | 21.266 | 68.568 | 1.00 | 20.57 | N |
| ATOM | 2660 | CA | ALA A 394 | 29.487 | 22.622 | 69.140 | 1.00 | 20.63 | C |
| ATOM | 2662 | CB | ALA A 394 | 29.963 | 22.621 | 70.604 | 1.00 | 20.34 | C |
| ATOM | 2666 | C | ALA A 394 | 30.311 | 23.610 | 68.336 | 1.00 | 20.23 | C |
| ATOM | 2667 | O | ALA A 394 | 29.905 | 24.737 | 68.177 | 1.00 | 21.04 | O |
| ATOM | 2668 | N | LEU A 395 | 31.461 | 23.190 | 67.822 | 1.00 | 20.50 | N |
| ATOM | 2670 | CA | LEU A 395 | 32.321 | 24.064 | 66.995 | 1.00 | 20.42 | C |
| ATOM | 2672 | CB | LEU A 395 | 33.735 | 23.485 | 66.916 | 1.00 | 20.95 | C |
| ATOM | 2675 | CG | LEU A 395 | 34.556 | 23.430 | 68.201 | 1.00 | 21.40 | C |
| ATOM | 2677 | CD1 | LEU A 395 | 35.821 | 22.577 | 68.001 | 1.00 | 22.05 | C |
| ATOM | 2681 | CD2 | LEU A 395 | 34.909 | 24.806 | 68.674 | 1.00 | 22.08 | C |
| ATOM | 2685 | C | LEU A 395 | 31.814 | 24.286 | 65.564 | 1.00 | 20.04 | C |
| ATOM | 2686 | O | LEU A 395 | 32.072 | 25.331 | 64.962 | 1.00 | 20.55 | O |
| ATOM | 2687 | N | GLN A 396 | 31.114 | 23.299 | 65.022 | 1.00 | 19.81 | N |
| ATOM | 2689 | CA | GLN A 396 | 30.460 | 23.425 | 63.726 | 1.00 | 19.89 | C |
| ATOM | 2691 | CB | GLN A 396 | 29.816 | 22.092 | 63.308 | 1.00 | 19.46 | C |
| ATOM | 2694 | CG | GLN A 396 | 29.349 | 22.087 | 61.880 | 1.00 | 20.05 | C |
| ATOM | 2697 | CD | GLN A 396 | 28.547 | 20.868 | 61.512 | 1.00 | 20.76 | C |
| ATOM | 2698 | OE1 | GLN A 396 | 28.946 | 20.093 | 60.639 | 1.00 | 20.87 | O |
| ATOM | 2699 | NE2 | GLN A 396 | 27.415 | 20.701 | 62.155 | 1.00 | 19.29 | N |
| ATOM | 2702 | C | GLN A 396 | 29.350 | 24.466 | 63.745 | 1.00 | 20.14 | C |
| ATOM | 2703 | O | GLN A 396 | 29.106 | 25.131 | 62.739 | 1.00 | 19.96 | O |
| ATOM | 2704 | N | GLN A 397 | 28.666 | 24.573 | 64.883 | 1.00 | 20.08 | N |
| ATOM | 2706 | CA | GLN A 397 | 27.486 | 25.435 | 65.013 | 1.00 | 20.81 | C |
| ATOM | 2708 | CB | GLN A 397 | 26.953 | 25.404 | 66.461 | 1.00 | 21.11 | C |
| ATOM | 2711 | CG | GLN A 397 | 25.829 | 26.375 | 66.731 | 1.00 | 22.41 | C |
| ATOM | 2714 | CD | GLN A 397 | 25.275 | 26.284 | 68.143 | 1.00 | 25.12 | C |
| ATOM | 2715 | OE1 | GLN A 397 | 25.037 | 27.319 | 68.798 | 1.00 | 27.27 | O |
| ATOM | 2716 | NE2 | GLN A 397 | 25.059 | 25.069 | 68.614 | 1.00 | 24.96 | N |
| ATOM | 2719 | C | GLN A 397 | 27.676 | 26.899 | 64.538 | 1.00 | 19.94 | C |
| ATOM | 2720 | O | GLN A 397 | 26.883 | 27.373 | 63.738 | 1.00 | 20.40 | O |
| ATOM | 2721 | N | PRO A 398 | 28.677 | 27.616 | 65.020 | 1.00 | 18.90 | N |
| ATOM | 2722 | CA | PRO A 398 | 28.857 | 29.018 | 64.614 | 1.00 | 19.15 | C |
| ATOM | 2724 | CB | PRO A 398 | 30.007 | 29.512 | 65.507 | 1.00 | 18.85 | C |
| ATOM | 2727 | CG | PRO A 398 | 30.743 | 28.277 | 65.909 | 1.00 | 20.07 | C |
| ATOM | 2730 | CD | PRO A 398 | 29.657 | 27.204 | 66.034 | 1.00 | 19.69 | C |
| ATOM | 2733 | C | PRO A 398 | 29.167 | 29.251 | 63.119 | 1.00 | 18.91 | C |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 2734 | O | PRO | A | 398 | 28.857 | 30.307 | 62.568 | 1.00 17.18 | O |
| ATOM | 2735 | N | TYR | A | 399 | 29.774 | 28.259 | 62.484 | 1.00 19.69 | N |
| ATOM | 2737 | CA | TYR | A | 399 | 30.012 | 28.289 | 61.040 | 1.00 19.26 | C |
| ATOM | 2739 | CB | TYR | A | 399 | 31.049 | 27.222 | 60.671 | 1.00 19.22 | C |
| ATOM | 2742 | CG | TYR | A | 399 | 32.415 | 27.587 | 61.189 | 1.00 18.15 | C |
| ATOM | 2743 | CD1 | TYR | A | 399 | 32.936 | 26.967 | 62.292 | 1.00 17.16 | C |
| ATOM | 2745 | CE1 | TYR | A | 399 | 34.165 | 27.340 | 62.790 | 1.00 19.02 | C |
| ATOM | 2747 | CZ | TYR | A | 399 | 34.894 | 28.332 | 62.166 | 1.00 18.35 | C |
| ATOM | 2748 | OH | TYR | A | 399 | 36.116 | 28.686 | 62.661 | 1.00 17.87 | O |
| ATOM | 2750 | CE2 | TYR | A | 399 | 34.388 | 28.977 | 61.073 | 1.00 18.04 | C |
| ATOM | 2752 | CD2 | TYR | A | 399 | 33.148 | 28.613 | 60.602 | 1.00 18.73 | C |
| ATOM | 2754 | C | TYR | A | 399 | 28.701 | 28.069 | 60.293 | 1.00 19.80 | C |
| ATOM | 2755 | O | TYR | A | 399 | 28.463 | 28.654 | 59.241 | 1.00 19.18 | O |
| ATOM | 2756 | N | VAL | A | 400 | 27.837 | 27.225 | 60.843 | 1.00 20.31 | N |
| ATOM | 2758 | CA | VAL | A | 400 | 26.541 | 27.011 | 60.241 | 1.00 20.60 | C |
| ATOM | 2760 | CB | VAL | A | 400 | 25.830 | 25.790 | 60.824 | 1.00 21.06 | C |
| ATOM | 2762 | CG1 | VAL | A | 400 | 24.389 | 25.645 | 60.234 | 1.00 21.52 | C |
| ATOM | 2766 | CG2 | VAL | A | 400 | 26.612 | 24.533 | 60.510 | 1.00 22.13 | C |
| ATOM | 2770 | C | VAL | A | 400 | 25.700 | 28.279 | 60.390 | 1.00 20.94 | C |
| ATOM | 2771 | O | VAL | A | 400 | 25.079 | 28.693 | 59.414 | 1.00 20.92 | O |
| ATOM | 2772 | N | GLU | A | 401 | 25.682 | 28.885 | 61.585 | 1.00 20.87 | N |
| ATOM | 2774 | CA | GLU | A | 401 | 24.985 | 30.170 | 61.810 | 1.00 21.54 | C |
| ATOM | 2776 | CB | GLU | A | 401 | 25.136 | 30.691 | 63.261 | 1.00 21.83 | C |
| ATOM | 2779 | CG | GLU | A | 401 | 24.475 | 29.824 | 64.338 | 1.00 25.56 | C |
| ATOM | 2782 | CD | GLU | A | 401 | 24.990 | 30.068 | 65.784 | 1.00 29.57 | C |
| ATOM | 2783 | OE1 | GLU | A | 401 | 25.925 | 30.868 | 65.976 | 1.00 31.30 | O |
| ATOM | 2784 | OE2 | GLU | A | 401 | 24.467 | 29.437 | 66.753 | 1.00 31.62 | O |
| ATOM | 2785 | C | GLU | A | 401 | 25.499 | 31.246 | 60.872 | 1.00 20.55 | C |
| ATOM | 2786 | O | GLU | A | 401 | 24.730 | 32.022 | 60.316 | 1.00 20.34 | O |
| ATOM | 2787 | N | ALA | A | 402 | 26.809 | 31.288 | 60.677 | 1.00 20.10 | N |
| ATOM | 2789 | CA | ALA | A | 402 | 27.407 | 32.335 | 59.848 | 1.00 19.57 | C |
| ATOM | 2791 | CB | ALA | A | 402 | 28.900 | 32.391 | 60.054 | 1.00 19.31 | C |
| ATOM | 2795 | C | ALA | A | 402 | 27.058 | 32.159 | 58.374 | 1.00 19.18 | C |
| ATOM | 2796 | O | ALA | A | 402 | 26.887 | 33.131 | 57.651 | 1.00 19.24 | O |
| ATOM | 2797 | N | LEU | A | 403 | 26.913 | 30.920 | 57.936 | 1.00 19.59 | N |
| ATOM | 2799 | CA | LEU | A | 403 | 26.528 | 30.647 | 56.568 | 1.00 20.27 | C |
| ATOM | 2801 | CB | LEU | A | 403 | 26.823 | 29.204 | 56.201 | 1.00 20.37 | C |
| ATOM | 2804 | CG | LEU | A | 403 | 26.459 | 28.814 | 54.774 | 1.00 21.69 | C |
| ATOM | 2806 | CD1 | LEU | A | 403 | 27.279 | 29.594 | 53.750 | 1.00 21.45 | C |
| ATOM | 2810 | CD2 | LEU | A | 403 | 26.646 | 27.298 | 54.582 | 1.00 24.93 | C |
| ATOM | 2814 | C | LEU | A | 403 | 25.052 | 30.962 | 56.353 | 1.00 20.94 | C |
| ATOM | 2815 | O | LEU | A | 403 | 24.664 | 31.443 | 55.290 | 1.00 21.36 | O |
| ATOM | 2816 | N | LEU | A | 404 | 24.234 | 30.697 | 57.362 | 1.00 21.38 | N |
| ATOM | 2818 | CA | LEU | A | 404 | 22.818 | 31.015 | 57.297 | 1.00 22.19 | C |
| ATOM | 2820 | CB | LEU | A | 404 | 22.133 | 30.528 | 58.566 | 1.00 22.76 | C |
| ATOM | 2823 | CG | LEU | A | 404 | 20.627 | 30.693 | 58.686 | 1.00 25.06 | C |
| ATOM | 2825 | CD1 | LEU | A | 404 | 19.934 | 30.227 | 57.408 | 1.00 27.19 | C |
| ATOM | 2829 | CD2 | LEU | A | 404 | 20.151 | 29.882 | 59.900 | 1.00 27.37 | C |

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ATOM  2833  C   LEU A 404     22.625 32.534 57.122  1.00 21.70        C
ATOM  2834  O   LEU A 404     22.002 32.975 56.168  1.00 21.60        O
ATOM  2835  N   SER A 405     23.195 33.319 58.031  1.00 21.30        N
ATOM  2837  CA  SER A 405     23.169 34.778 57.943  1.00 20.95        C
ATOM  2839  CB  SER A 405     23.898 35.380 59.123  1.00 21.13        C
ATOM  2842  OG  SER A 405     23.248 34.989 60.299  1.00 23.32        O
ATOM  2844  C   SER A 405     23.796 35.324 56.679  1.00 20.23        C
ATOM  2845  O   SER A 405     23.283 36.246 56.110  1.00 20.11        O
ATOM  2846  N   TYR A 406     24.905 34.757 56.235  1.00 20.19        N
ATOM  2848  CA  TYR A 406     25.554 35.275 55.037  1.00 20.26        C
ATOM  2850  CB  TYR A 406     26.921 34.616 54.808  1.00 20.03        C
ATOM  2853  CG  TYR A 406     27.677 35.166 53.628  1.00 17.48        C
ATOM  2854  CD1 TYR A 406     28.569 36.203 53.766  1.00 17.11        C
ATOM  2856  CE1 TYR A 406     29.248 36.732 52.656  1.00 15.31        C
ATOM  2858  CZ  TYR A 406     29.050 36.154 51.417  1.00 14.97        C
ATOM  2859  OH  TYR A 406     29.700 36.603 50.291  1.00 12.86        O
ATOM  2861  CE2 TYR A 406     28.182 35.116 51.282  1.00 14.49        C
ATOM  2863  CD2 TYR A 406     27.509 34.625 52.377  1.00 15.94        C
ATOM  2865  C   TYR A 406     24.624 35.120 53.829  1.00 20.61        C
ATOM  2866  O   TYR A 406     24.381 36.074 53.095  1.00 19.54        O
ATOM  2867  N   THR A 407     24.073 33.924 53.652  1.00 21.38        N
ATOM  2869  CA  THR A 407     23.150 33.680 52.531  1.00 21.34        C
ATOM  2871  CB  THR A 407     22.887 32.191 52.342  1.00 20.99        C
ATOM  2873  OG1 THR A 407     22.439 31.609 53.558  1.00 19.37        O
ATOM  2875  CG2 THR A 407     24.193 31.441 52.047  1.00 21.26        C
ATOM  2879  C   THR A 407     21.852 34.474 52.632  1.00 22.27        C
ATOM  2880  O   THR A 407     21.327 34.862 51.619  1.00 21.70        O
ATOM  2881  N   ARG A 408     21.359 34.748 53.840  1.00 24.06        N
ATOM  2883  CA  ARG A 408     20.162 35.581 54.018  1.00 25.87        C
ATOM  2885  CB  ARG A 408     19.713 35.615 55.484  1.00 26.81        C
ATOM  2888  CG  ARG A 408     18.703 34.539 55.906  1.00 31.03        C
ATOM  2891  CD  ARG A 408     18.843 34.084 57.386  1.00 36.58        C
ATOM  2894  NE  ARG A 408     17.578 34.128 58.139  1.00 40.80        N
ATOM  2896  CZ  ARG A 408     16.691 33.125 58.214  1.00 45.77        C
ATOM  2897  NH1 ARG A 408     16.903 31.965 57.576  1.00 48.06        N
ATOM  2900  NH2 ARG A 408     15.573 33.278 58.927  1.00 46.91        N
ATOM  2903  C   ARG A 408     20.412 37.026 53.568  1.00 26.33        C
ATOM  2904  O   ARG A 408     19.545 37.660 52.972  1.00 25.83        O
ATOM  2905  N   ILE A 409     21.600 37.548 53.862  1.00 27.14        N
ATOM  2907  CA  ILE A 409     21.931 38.933 53.524  1.00 27.95        C
ATOM  2909  CB  ILE A 409     22.948 39.502 54.544  1.00 28.07        C
ATOM  2911  CG1 ILE A 409     22.378 39.380 55.969  1.00 28.89        C
ATOM  2914  CD1 ILE A 409     23.421 39.279 57.074  1.00 29.04        C
ATOM  2918  CG2 ILE A 409     23.287 40.965 54.207  1.00 27.74        C
ATOM  2922  C   ILE A 409     22.435 39.106 52.069  1.00 28.50        C
ATOM  2923  O   ILE A 409     22.057 40.064 51.386  1.00 27.67        O
ATOM  2924  N   LYS A 410     23.261 38.167 51.608  1.00 29.16        N
ATOM  2926  CA  LYS A 410     23.895 38.251 50.302  1.00 30.15        C
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ATOM  2928  CB  LYS A 410    25.247 37.506 50.311 1.00 30.82        C
ATOM  2931  CG  LYS A 410    26.062 37.547 48.967 1.00 33.21        C
ATOM  2934  CD  LYS A 410    26.430 36.112 48.413 1.00 35.52        C
ATOM  2937  CE  LYS A 410    26.557 36.067 46.877 1.00 36.92        C
ATOM  2940  NZ  LYS A 410    25.850 34.904 46.256 1.00 37.82        N
ATOM  2944  C   LYS A 410    22.970 37.748 49.193 1.00 30.35        C
ATOM  2945  O   LYS A 410    23.070 38.214 48.058 1.00 30.24        O
ATOM  2946  N   ARG A 411    22.051 36.833 49.509 1.00 30.70        N
ATOM  2948  CA  ARG A 411    21.067 36.362 48.517 1.00 31.19        C
ATOM  2950  CB  ARG A 411    21.466 34.987 47.970 1.00 31.83        C
ATOM  2953  CG  ARG A 411    22.694 34.988 47.043 1.00 35.36        C
ATOM  2956  CD  ARG A 411    23.101 33.573 46.543 1.00 40.08        C
ATOM  2959  NE  ARG A 411    23.290 33.462 45.081 1.00 42.67        N
ATOM  2961  CZ  ARG A 411    22.310 33.545 44.163 1.00 43.67        C
ATOM  2962  NH1 ARG A 411    21.040 33.758 44.521 1.00 43.02        N
ATOM  2965  NH2 ARG A 411    22.609 33.417 42.869 1.00 43.56        N
ATOM  2968  C   ARG A 411    19.656 36.304 49.105 1.00 30.61        C
ATOM  2969  O   ARG A 411    19.099 35.236 49.317 1.00 29.92        O
ATOM  2970  N   PRO A 412    19.063 37.461 49.349 1.00 30.71        N
ATOM  2971  CA  PRO A 412    17.830 37.526 50.136 1.00 30.88        C
ATOM  2973  CB  PRO A 412    17.654 39.027 50.371 1.00 30.84        C
ATOM  2976  CG  PRO A 412    18.399 39.681 49.265 1.00 30.56        C
ATOM  2979  CD  PRO A 412    19.507 38.787 48.886 1.00 30.44        C
ATOM  2982  C   PRO A 412    16.590 36.922 49.444 1.00 31.46        C
ATOM  2983  O   PRO A 412    15.656 36.514 50.154 1.00 31.62        O
ATOM  2984  N   GLN A 413    16.586 36.855 48.109 1.00 31.46        N
ATOM  2986  CA  GLN A 413    15.450 36.308 47.363 1.00 31.54        C
ATOM  2988  CB  GLN A 413    15.047 37.265 46.225 1.00 31.75        C
ATOM  2991  CG  GLN A 413    14.186 38.451 46.677 1.00 32.45        C
ATOM  2994  CD  GLN A 413    12.697 38.121 46.787 1.00 33.94        C
ATOM  2995  OE1 GLN A 413    11.901 38.467 45.903 1.00 34.73        O
ATOM  2996  NE2 GLN A 413    12.315 37.478 47.885 1.00 34.89        N
ATOM  2999  C   GLN A 413    15.690 34.878 46.829 1.00 31.36        C
ATOM  3000  O   GLN A 413    14.913 34.383 46.013 1.00 31.27        O
ATOM  3001  N   ASP A 414    16.754 34.220 47.305 1.00 31.27        N
ATOM  3003  CA  ASP A 414    16.985 32.786 47.074 1.00 30.71        C
ATOM  3005  CB  ASP A 414    18.280 32.560 46.309 1.00 31.02        C
ATOM  3008  CG  ASP A 414    18.531 31.093 46.011 1.00 31.49        C
ATOM  3009  OD1 ASP A 414    17.565 30.318 45.914 1.00 30.43        O
ATOM  3010  OD2 ASP A 414    19.675 30.626 45.858 1.00 35.74        O
ATOM  3011  C   ASP A 414    17.011 32.013 48.395 1.00 29.99        C
ATOM  3012  O   ASP A 414    18.053 31.757 48.972 1.00 30.08        O
ATOM  3013  N   GLN A 415    15.825 31.637 48.835 1.00 29.76        N
ATOM  3015  CA  GLN A 415    15.558 30.998 50.121 1.00 29.41        C
ATOM  3017  CB  GLN A 415    14.022 30.850 50.207 1.00 30.33        C
ATOM  3020  CG  GLN A 415    13.436 30.284 51.497 1.00 33.12        C
ATOM  3023  CD  GLN A 415    11.907 30.459 51.562 1.00 36.96        C
ATOM  3024  OE1 GLN A 415    11.336 30.617 52.650 1.00 40.03        O
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| ATOM | 3025 | NE2 | GLN | A | 415 | 11.248 | 30.432 | 50.397 | 1.00 | 38.38 | N |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 3028 | C | GLN | A | 415 | 16.252 | 29.639 | 50.270 | 1.00 | 27.79 | C |
| ATOM | 3029 | O | GLN | A | 415 | 16.727 | 29.292 | 51.340 | 1.00 | 27.83 | O |
| ATOM | 3030 | N | LEU | A | 416 | 16.335 | 28.887 | 49.179 | 1.00 | 26.66 | N |
| ATOM | 3032 | CA | LEU | A | 416 | 16.873 | 27.521 | 49.191 | 1.00 | 25.86 | C |
| ATOM | 3034 | CB | LEU | A | 416 | 16.172 | 26.680 | 48.121 | 1.00 | 25.70 | C |
| ATOM | 3037 | CG | LEU | A | 416 | 14.650 | 26.622 | 48.262 | 1.00 | 25.24 | C |
| ATOM | 3039 | CD1 | LEU | A | 416 | 14.069 | 25.860 | 47.119 | 1.00 | 24.23 | C |
| ATOM | 3043 | CD2 | LEU | A | 416 | 14.276 | 25.986 | 49.577 | 1.00 | 25.64 | C |
| ATOM | 3047 | C | LEU | A | 416 | 18.381 | 27.417 | 48.970 | 1.00 | 25.39 | C |
| ATOM | 3048 | O | LEU | A | 416 | 18.920 | 26.315 | 48.870 | 1.00 | 25.50 | O |
| ATOM | 3049 | N | ARG | A | 417 | 19.040 | 28.562 | 48.846 | 1.00 | 24.30 | N |
| ATOM | 3051 | CA | ARG | A | 417 | 20.480 | 28.648 | 48.700 | 1.00 | 23.93 | C |
| ATOM | 3053 | CB | ARG | A | 417 | 20.904 | 30.109 | 48.968 | 1.00 | 24.83 | C |
| ATOM | 3056 | CG | ARG | A | 417 | 21.901 | 30.674 | 48.016 | 1.00 | 26.61 | C |
| ATOM | 3059 | CD | ARG | A | 417 | 23.170 | 29.934 | 47.979 | 1.00 | 29.59 | C |
| ATOM | 3062 | NE | ARG | A | 417 | 24.219 | 30.705 | 47.300 | 1.00 | 31.46 | N |
| ATOM | 3064 | CZ | ARG | A | 417 | 24.563 | 30.566 | 46.028 | 1.00 | 32.48 | C |
| ATOM | 3065 | NH1 | ARG | A | 417 | 23.923 | 29.718 | 45.218 | 1.00 | 31.64 | N |
| ATOM | 3068 | NH2 | ARG | A | 417 | 25.561 | 31.297 | 45.560 | 1.00 | 35.09 | N |
| ATOM | 3071 | C | ARG | A | 417 | 21.189 | 27.809 | 49.740 | 1.00 | 22.27 | C |
| ATOM | 3072 | O | ARG | A | 417 | 22.056 | 27.006 | 49.463 | 1.00 | 22.01 | O |
| ATOM | 3073 | N | PHE | A | 418 | 20.832 | 28.087 | 50.966 | 1.00 | 20.58 | N |
| ATOM | 3075 | CA | PHE | A | 418 | 21.497 | 27.534 | 52.085 | 1.00 | 20.58 | C |
| ATOM | 3077 | CB | PHE | A | 418 | 20.929 | 28.221 | 53.334 | 1.00 | 20.56 | C |
| ATOM | 3080 | CG | PHE | A | 418 | 21.459 | 27.688 | 54.603 | 1.00 | 21.90 | C |
| ATOM | 3081 | CD1 | PHE | A | 418 | 22.804 | 27.730 | 54.866 | 1.00 | 22.80 | C |
| ATOM | 3083 | CE1 | PHE | A | 418 | 23.301 | 27.249 | 56.078 | 1.00 | 24.14 | C |
| ATOM | 3085 | CZ | PHE | A | 418 | 22.445 | 26.710 | 57.020 | 1.00 | 22.87 | C |
| ATOM | 3087 | CE2 | PHE | A | 418 | 21.104 | 26.667 | 56.766 | 1.00 | 24.34 | C |
| ATOM | 3089 | CD2 | PHE | A | 418 | 20.607 | 27.160 | 55.557 | 1.00 | 24.46 | C |
| ATOM | 3091 | C | PHE | A | 418 | 21.344 | 25.993 | 52.093 | 1.00 | 19.91 | C |
| ATOM | 3092 | O | PHE | A | 418 | 22.341 | 25.280 | 52.142 | 1.00 | 19.56 | O |
| ATOM | 3093 | N | PRO | A | 419 | 20.113 | 25.482 | 52.036 | 1.00 | 18.94 | N |
| ATOM | 3094 | CA | PRO | A | 419 | 19.937 | 24.034 | 51.997 | 1.00 | 18.75 | C |
| ATOM | 3096 | CB | PRO | A | 419 | 18.399 | 23.841 | 52.040 | 1.00 | 18.34 | C |
| ATOM | 3099 | CG | PRO | A | 419 | 17.805 | 25.158 | 51.682 | 1.00 | 18.39 | C |
| ATOM | 3102 | CD | PRO | A | 419 | 18.813 | 26.194 | 52.076 | 1.00 | 18.47 | C |
| ATOM | 3105 | C | PRO | A | 419 | 20.570 | 23.371 | 50.779 | 1.00 | 18.68 | C |
| ATOM | 3106 | O | PRO | A | 419 | 21.038 | 22.275 | 50.925 | 1.00 | 17.29 | O |
| ATOM | 3107 | N | ARG | A | 420 | 20.604 | 24.001 | 49.618 | 1.00 | 19.60 | N |
| ATOM | 3109 | CA | ARG | A | 420 | 21.293 | 23.391 | 48.482 | 1.00 | 20.80 | C |
| ATOM | 3111 | CB | ARG | A | 420 | 21.115 | 24.220 | 47.208 | 1.00 | 21.78 | C |
| ATOM | 3114 | CG | ARG | A | 420 | 19.738 | 24.126 | 46.596 | 1.00 | 23.43 | C |
| ATOM | 3117 | CD | ARG | A | 420 | 19.688 | 24.371 | 45.091 | 1.00 | 27.38 | C |
| ATOM | 3120 | NE | ARG | A | 420 | 18.507 | 25.153 | 44.721 | 1.00 | 28.41 | N |
| ATOM | 3122 | CZ | ARG | A | 420 | 18.369 | 26.451 | 44.979 | 1.00 | 30.57 | C |
| ATOM | 3123 | NH1 | ARG | A | 420 | 19.334 | 27.127 | 45.584 | 1.00 | 31.62 | N |

| ATOM | 3126 | NH2 | ARG | A | 420 | 17.267 | 27.088 | 44.623 | 1.00 | 32.90 | N |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 3129 | C   | ARG | A | 420 | 22.776 | 23.220 | 48.789 | 1.00 | 21.08 | C |
| ATOM | 3130 | O   | ARG | A | 420 | 23.384 | 22.202 | 48.436 | 1.00 | 21.37 | O |
| ATOM | 3131 | N   | MET | A | 421 | 23.359 | 24.179 | 49.502 | 1.00 | 21.52 | N |
| ATOM | 3133 | CA  | MET | A | 421 | 24.789 | 24.086 | 49.848 | 1.00 | 21.36 | C |
| ATOM | 3135 | CB  | MET | A | 421 | 25.274 | 25.382 | 50.493 | 1.00 | 21.17 | C |
| ATOM | 3138 | CG  | MET | A | 421 | 25.343 | 26.476 | 49.534 | 1.00 | 23.46 | C |
| ATOM | 3141 | SD  | MET | A | 421 | 25.907 | 27.975 | 50.266 | 1.00 | 26.15 | S |
| ATOM | 3142 | CE  | MET | A | 421 | 27.451 | 27.516 | 51.009 | 1.00 | 26.23 | C |
| ATOM | 3146 | C   | MET | A | 421 | 25.065 | 22.927 | 50.794 | 1.00 | 20.75 | C |
| ATOM | 3147 | O   | MET | A | 421 | 25.982 | 22.134 | 50.582 | 1.00 | 18.82 | O |
| ATOM | 3148 | N   | LEU | A | 422 | 24.303 | 22.882 | 51.878 | 1.00 | 21.18 | N |
| ATOM | 3150 | CA  | LEU | A | 422 | 24.394 | 21.749 | 52.801 | 1.00 | 21.92 | C |
| ATOM | 3152 | CB  | LEU | A | 422 | 23.453 | 21.908 | 54.002 | 1.00 | 21.86 | C |
| ATOM | 3155 | CG  | LEU | A | 422 | 23.727 | 23.166 | 54.819 | 1.00 | 23.07 | C |
| ATOM | 3157 | CD1 | LEU | A | 422 | 22.756 | 23.247 | 55.989 | 1.00 | 24.63 | C |
| ATOM | 3161 | CD2 | LEU | A | 422 | 25.168 | 23.226 | 55.326 | 1.00 | 25.26 | C |
| ATOM | 3165 | C   | LEU | A | 422 | 24.156 | 20.430 | 52.081 | 1.00 | 21.25 | C |
| ATOM | 3166 | O   | LEU | A | 422 | 24.808 | 19.472 | 52.403 | 1.00 | 22.05 | O |
| ATOM | 3167 | N   | MET | A | 423 | 23.308 | 20.382 | 51.066 | 1.00 | 21.30 | N |
| ATOM | 3169 | CA  | MET | A | 423 | 23.081 | 19.119 | 50.330 | 1.00 | 22.24 | C |
| ATOM | 3171 | CB  | MET | A | 423 | 21.931 | 19.232 | 49.313 | 1.00 | 23.34 | C |
| ATOM | 3174 | CG  | MET | A | 423 | 20.567 | 19.696 | 49.843 | 1.00 | 28.24 | C |
| ATOM | 3177 | SD  | MET | A | 423 | 19.535 | 18.438 | 50.632 | 1.00 | 35.70 | S |
| ATOM | 3178 | CE  | MET | A | 423 | 20.458 | 18.220 | 52.061 | 1.00 | 33.45 | C |
| ATOM | 3182 | C   | MET | A | 423 | 24.301 | 18.610 | 49.558 | 1.00 | 21.01 | C |
| ATOM | 3183 | O   | MET | A | 423 | 24.358 | 17.438 | 49.194 | 1.00 | 21.62 | O |
| ATOM | 3184 | N   | LYS | A | 424 | 25.233 | 19.496 | 49.238 | 1.00 | 18.97 | N |
| ATOM | 3186 | CA  | LYS | A | 424 | 26.509 | 19.095 | 48.662 | 1.00 | 17.89 | C |
| ATOM | 3188 | CB  | LYS | A | 424 | 27.290 | 20.310 | 48.155 | 1.00 | 17.59 | C |
| ATOM | 3191 | CG  | LYS | A | 424 | 26.594 | 21.018 | 46.988 | 1.00 | 18.56 | C |
| ATOM | 3194 | CD  | LYS | A | 424 | 26.467 | 20.113 | 45.762 | 1.00 | 19.26 | C |
| ATOM | 3197 | CE  | LYS | A | 424 | 25.693 | 20.769 | 44.631 | 1.00 | 20.40 | C |
| ATOM | 3200 | NZ  | LYS | A | 424 | 25.020 | 19.777 | 43.751 | 1.00 | 21.19 | N |
| ATOM | 3204 | C   | LYS | A | 424 | 27.372 | 18.290 | 49.622 | 1.00 | 16.82 | C |
| ATOM | 3205 | O   | LYS | A | 424 | 28.179 | 17.473 | 49.186 | 1.00 | 16.71 | O |
| ATOM | 3206 | N   | LEU | A | 425 | 27.217 | 18.529 | 50.923 | 1.00 | 15.99 | N |
| ATOM | 3208 | CA  | LEU | A | 425 | 27.866 | 17.722 | 51.925 | 1.00 | 15.25 | C |
| ATOM | 3210 | CB  | LEU | A | 425 | 27.639 | 18.323 | 53.316 | 1.00 | 15.87 | C |
| ATOM | 3213 | CG  | LEU | A | 425 | 28.185 | 19.728 | 53.664 | 1.00 | 16.61 | C |
| ATOM | 3215 | CD1 | LEU | A | 425 | 27.714 | 20.115 | 55.047 | 1.00 | 17.81 | C |
| ATOM | 3219 | CD2 | LEU | A | 425 | 29.689 | 19.777 | 53.638 | 1.00 | 17.71 | C |
| ATOM | 3223 | C   | LEU | A | 425 | 27.367 | 16.266 | 51.846 | 1.00 | 15.24 | C |
| ATOM | 3224 | O   | LEU | A | 425 | 28.117 | 15.346 | 52.119 | 1.00 | 15.24 | O |
| ATOM | 3225 | N   | VAL | A | 426 | 26.103 | 16.064 | 51.470 | 1.00 | 14.71 | N |
| ATOM | 3227 | CA  | VAL | A | 426 | 25.576 | 14.726 | 51.249 | 1.00 | 14.48 | C |
| ATOM | 3229 | CB  | VAL | A | 426 | 24.041 | 14.703 | 50.975 | 1.00 | 13.91 | C |
| ATOM | 3231 | CG1 | VAL | A | 426 | 23.580 | 13.309 | 50.838 | 1.00 | 13.11 | C |

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| ATOM | 3235 | CG2 | VAL | A | 426 | 23.228 | 15.408 | 52.101 | 1.00 | 14.22 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 3239 | C | VAL | A | 426 | 26.263 | 14.040 | 50.077 | 1.00 | 15.09 | C |
| ATOM | 3240 | O | VAL | A | 426 | 26.597 | 12.852 | 50.171 | 1.00 | 14.93 | O |
| ATOM | 3241 | N | SER | A | 427 | 26.374 | 14.758 | 48.950 | 1.00 | 15.49 | N |
| ATOM | 3243 | CA | SER | A | 427 | 27.035 | 14.272 | 47.736 | 1.00 | 15.56 | C |
| ATOM | 3245 | CB | SER | A | 427 | 27.087 | 15.387 | 46.694 | 1.00 | 15.86 | C |
| ATOM | 3248 | OG | SER | A | 427 | 25.829 | 15.628 | 46.117 | 1.00 | 18.97 | O |
| ATOM | 3250 | C | SER | A | 427 | 28.483 | 13.883 | 48.043 | 1.00 | 15.75 | C |
| ATOM | 3251 | O | SER | A | 427 | 28.965 | 12.837 | 47.616 | 1.00 | 15.74 | O |
| ATOM | 3252 | N | LEU | A | 428 | 29.163 | 14.730 | 48.806 | 1.00 | 15.28 | N |
| ATOM | 3254 | CA | LEU | A | 428 | 30.518 | 14.463 | 49.183 | 1.00 | 16.34 | C |
| ATOM | 3256 | CB | LEU | A | 428 | 31.104 | 15.660 | 49.935 | 1.00 | 16.46 | C |
| ATOM | 3259 | CG | LEU | A | 428 | 31.367 | 16.893 | 49.096 | 1.00 | 16.94 | C |
| ATOM | 3261 | CD1 | LEU | A | 428 | 31.746 | 18.004 | 50.036 | 1.00 | 19.53 | C |
| ATOM | 3265 | CD2 | LEU | A | 428 | 32.479 | 16.617 | 48.078 | 1.00 | 16.50 | C |
| ATOM | 3269 | C | LEU | A | 428 | 30.699 | 13.199 | 50.022 | 1.00 | 16.91 | C |
| ATOM | 3270 | O | LEU | A | 428 | 31.729 | 12.536 | 49.880 | 1.00 | 16.87 | O |
| ATOM | 3271 | N | ARG | A | 429 | 29.754 | 12.872 | 50.916 | 1.00 | 17.30 | N |
| ATOM | 3273 | CA | ARG | A | 429 | 29.880 | 11.617 | 51.670 | 1.00 | 17.91 | C |
| ATOM | 3275 | CB | ARG | A | 429 | 28.730 | 11.374 | 52.612 | 1.00 | 18.11 | C |
| ATOM | 3278 | CG | ARG | A | 429 | 28.861 | 11.936 | 53.873 | 1.00 | 19.58 | C |
| ATOM | 3281 | CD | ARG | A | 429 | 30.164 | 11.661 | 54.641 | 1.00 | 21.53 | C |
| ATOM | 3284 | NE | ARG | A | 429 | 30.184 | 12.737 | 55.630 | 1.00 | 21.34 | N |
| ATOM | 3286 | CZ | ARG | A | 429 | 29.809 | 12.585 | 56.872 | 1.00 | 19.67 | C |
| ATOM | 3287 | NH1 | ARG | A | 429 | 29.501 | 11.405 | 57.320 | 1.00 | 16.91 | N |
| ATOM | 3290 | NH2 | ARG | A | 429 | 29.784 | 13.633 | 57.677 | 1.00 | 24.69 | N |
| ATOM | 3293 | C | ARG | A | 429 | 29.885 | 10.424 | 50.759 | 1.00 | 18.03 | C |
| ATOM | 3294 | O | ARG | A | 429 | 30.661 | 9.500 | 50.948 | 1.00 | 19.08 | O |
| ATOM | 3295 | N | THR | A | 430 | 28.964 | 10.413 | 49.814 | 1.00 | 17.59 | N |
| ATOM | 3297 | CA | THR | A | 430 | 28.948 | 9.365 | 48.810 | 1.00 | 17.28 | C |
| ATOM | 3299 | CB | THR | A | 430 | 27.691 | 9.495 | 47.972 | 1.00 | 16.89 | C |
| ATOM | 3301 | OG1 | THR | A | 430 | 26.552 | 9.207 | 48.793 | 1.00 | 16.44 | O |
| ATOM | 3303 | CG2 | THR | A | 430 | 27.647 | 8.457 | 46.895 | 1.00 | 16.72 | C |
| ATOM | 3307 | C | THR | A | 430 | 30.216 | 9.384 | 47.921 | 1.00 | 17.34 | C |
| ATOM | 3308 | O | THR | A | 430 | 30.728 | 8.343 | 47.576 | 1.00 | 18.01 | O |
| ATOM | 3309 | N | LEU | A | 431 | 30.718 | 10.550 | 47.541 | 1.00 | 17.45 | N |
| ATOM | 3311 | CA | LEU | A | 431 | 31.968 | 10.598 | 46.758 | 1.00 | 17.22 | C |
| ATOM | 3313 | CB | LEU | A | 431 | 32.272 | 12.015 | 46.336 | 1.00 | 16.74 | C |
| ATOM | 3316 | CG | LEU | A | 431 | 31.800 | 12.552 | 44.966 | 1.00 | 16.62 | C |
| ATOM | 3318 | CD1 | LEU | A | 431 | 31.263 | 11.522 | 44.010 | 1.00 | 15.12 | C |
| ATOM | 3322 | CD2 | LEU | A | 431 | 30.838 | 13.686 | 45.134 | 1.00 | 14.98 | C |
| ATOM | 3326 | C | LEU | A | 431 | 33.159 | 10.006 | 47.554 | 1.00 | 17.29 | C |
| ATOM | 3327 | O | LEU | A | 431 | 34.049 | 9.402 | 47.004 | 1.00 | 16.51 | O |
| ATOM | 3328 | N | SER | A | 432 | 33.108 | 10.131 | 48.863 | 1.00 | 17.72 | N |
| ATOM | 3330 | CA | SER | A | 432 | 34.080 | 9.531 | 49.726 | 1.00 | 18.63 | C |
| ATOM | 3332 | CB | SER | A | 432 | 33.796 | 9.946 | 51.149 | 1.00 | 18.84 | C |
| ATOM | 3335 | OG | SER | A | 432 | 34.982 | 9.889 | 51.872 | 1.00 | 20.35 | O |
| ATOM | 3337 | C | SER | A | 432 | 34.113 | 8.013 | 49.691 | 1.00 | 19.34 | C |

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ATOM  3338 O   SER A 432     35.207  7.421 49.779 1.00 20.24          O
ATOM  3339 N   SER A 433     32.933  7.383 49.648 1.00 19.33          N
ATOM  3341 CA  SER A 433     32.830  5.935 49.475 1.00 19.25          C
ATOM  3343 CB  SER A 433     31.380  5.457 49.606 1.00 19.52          C
ATOM  3346 OG  SER A 433     30.864  5.761 50.876 1.00 23.43          O
ATOM  3348 C   SER A 433     33.315  5.497 48.112 1.00 18.21          C
ATOM  3349 O   SER A 433     33.955  4.449 47.984 1.00 18.98          O
ATOM  3350 N   VAL A 434     32.938  6.245 47.088 1.00 17.26          N
ATOM  3352 CA  VAL A 434     33.393  5.976 45.732 1.00 17.49          C
ATOM  3354 CB  VAL A 434     32.777  6.997 44.757 1.00 17.59          C
ATOM  3356 CG1 VAL A 434     33.461  6.954 43.419 1.00 17.34          C
ATOM  3360 CG2 VAL A 434     31.222  6.725 44.582 1.00 17.82          C
ATOM  3364 C   VAL A 434     34.947  5.981 45.668 1.00 17.71          C
ATOM  3365 O   VAL A 434     35.566  5.123 45.023 1.00 17.05          O
ATOM  3366 N   HIS A 435     35.548  6.927 46.376 1.00 17.43          N
ATOM  3368 CA  HIS A 435     36.977  7.015 46.504 1.00 18.66          C
ATOM  3370 CB  HIS A 435     37.352  8.325 47.193 1.00 18.49          C
ATOM  3373 CG  HIS A 435     38.785  8.406 47.609 1.00 18.52          C
ATOM  3374 ND1 HIS A 435     39.163  8.437 48.933 1.00 16.02          N
ATOM  3376 CE1 HIS A 435     40.478  8.526 49.004 1.00 17.34          C
ATOM  3378 NE2 HIS A 435     40.968  8.542 47.775 1.00 16.72          N
ATOM  3380 CD2 HIS A 435     39.930  8.488 46.882 1.00 17.51          C
ATOM  3382 C   HIS A 435     37.608  5.813 47.245 1.00 19.59          C
ATOM  3383 O   HIS A 435     38.643  5.325 46.816 1.00 19.38          O
ATOM  3384 N   SER A 436     37.001  5.349 48.339 1.00 20.61          N
ATOM  3386 CA  SER A 436     37.480  4.150 49.021 1.00 21.50          C
ATOM  3388 CB  SER A 436     36.635  3.807 50.249 1.00 21.87          C
ATOM  3391 OG  SER A 436     36.836  4.754 51.285 1.00 24.47          O
ATOM  3393 C   SER A 436     37.444  2.984 48.060 1.00 21.81          C
ATOM  3394 O   SER A 436     38.369  2.164 48.064 1.00 22.13          O
ATOM  3395 N   GLU A 437     36.402  2.909 47.225 1.00 21.73          N
ATOM  3397 CA  GLU A 437     36.338  1.831 46.229 1.00 22.18          C
ATOM  3399 CB  GLU A 437     34.969  1.748 45.500 1.00 22.15          C
ATOM  3402 CG  GLU A 437     33.758  1.448 46.410 1.00 24.83          C
ATOM  3405 CD  GLU A 437     32.416  2.022 45.883 1.00 27.98          C
ATOM  3406 OE1 GLU A 437     31.628  2.616 46.692 1.00 29.68          O
ATOM  3407 OE2 GLU A 437     32.143  1.887 44.661 1.00 27.41          O
ATOM  3408 C   GLU A 437     37.484  1.970 45.215 1.00 21.66          C
ATOM  3409 O   GLU A 437     38.007  0.954 44.753 1.00 21.07          O
ATOM  3410 N   GLN A 438     37.872  3.205 44.870 1.00 21.22          N
ATOM  3412 CA  GLN A 438     38.960  3.418 43.898 1.00 21.53          C
ATOM  3414 CB  GLN A 438     38.925  4.838 43.308 1.00 21.92          C
ATOM  3417 CG  GLN A 438     40.182  5.303 42.532 1.00 22.14          C
ATOM  3420 CD  GLN A 438     40.414  4.542 41.242 1.00 22.72          C
ATOM  3421 OE1 GLN A 438     39.994  4.978 40.162 1.00 22.48          O
ATOM  3422 NE2 GLN A 438     41.103  3.411 41.344 1.00 21.67          N
ATOM  3425 C   GLN A 438     40.309  3.088 44.552 1.00 21.78          C
ATOM  3426 O   GLN A 438     41.221  2.624 43.892 1.00 21.15          O
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ATOM  3427 N   VAL A 439   40.406  3.287 45.863 1.00 22.24      N
ATOM  3429 CA  VAL A 439   41.626  2.983 46.581 1.00 22.93      C
ATOM  3431 CB  VAL A 439   41.617  3.590 47.995 1.00 22.83      C
ATOM  3433 CG1 VAL A 439   42.726  2.982 48.850 1.00 22.44      C
ATOM  3437 CG2 VAL A 439   41.782  5.070 47.915 1.00 23.07      C
ATOM  3441 C   VAL A 439   41.797  1.472 46.662 1.00 23.19      C
ATOM  3442 O   VAL A 439   42.904  0.957 46.531 1.00 23.61      O
ATOM  3443 N   PHE A 440   40.686  0.782 46.887 1.00 23.59      N
ATOM  3445 CA  PHE A 440   40.632 -0.679 46.948 1.00 23.72      C
ATOM  3447 CB  PHE A 440   39.216 -1.108 47.359 1.00 23.83      C
ATOM  3450 CG  PHE A 440   39.072 -2.575 47.643 1.00 26.10      C
ATOM  3451 CD1 PHE A 440   39.203 -3.059 48.944 1.00 27.31      C
ATOM  3453 CE1 PHE A 440   39.080 -4.425 49.208 1.00 28.42      C
ATOM  3455 CZ  PHE A 440   38.812 -5.337 48.155 1.00 28.49      C
ATOM  3457 CE2 PHE A 440   38.676 -4.863 46.855 1.00 27.80      C
ATOM  3459 CD2 PHE A 440   38.798 -3.482 46.603 1.00 27.54      C
ATOM  3461 C   PHE A 440   41.031 -1.261 45.592 1.00 23.41      C
ATOM  3462 O   PHE A 440   41.835 -2.175 45.534 1.00 23.32      O
ATOM  3463 N   ALA A 441   40.503 -0.700 44.507 1.00 23.68      N
ATOM  3465 CA  ALA A 441   40.850 -1.132 43.144 1.00 24.12      C
ATOM  3467 CB  ALA A 441   39.945 -0.475 42.110 1.00 23.79      C
ATOM  3471 C   ALA A 441   42.320 -0.901 42.762 1.00 24.90      C
ATOM  3472 O   ALA A 441   42.830 -1.583 41.875 1.00 24.76      O
ATOM  3473 N   LEU A 442   42.985  0.062 43.408 1.00 25.88      N
ATOM  3475 CA  LEU A 442   44.424  0.258 43.232 1.00 26.68      C
ATOM  3477 CB  LEU A 442   44.873  1.619 43.763 1.00 26.33      C
ATOM  3480 CG  LEU A 442   44.327  2.844 43.037 1.00 26.21      C
ATOM  3482 CD1 LEU A 442   44.704  4.101 43.802 1.00 25.44      C
ATOM  3486 CD2 LEU A 442   44.812  2.906 41.604 1.00 25.65      C
ATOM  3490 C   LEU A 442   45.206 -0.852 43.922 1.00 27.53      C
ATOM  3491 O   LEU A 442   46.138 -1.376 43.354 1.00 27.92      O
ATOM  3492 N   ARG A 443   44.801 -1.200 45.139 1.00 29.13      N
ATOM  3494 CA  ARG A 443   45.410 -2.278 45.937 1.00 30.54      C
ATOM  3496 CB  ARG A 443   44.631 -2.482 47.251 1.00 31.28      C
ATOM  3499 CG  ARG A 443   45.319 -1.941 48.495 1.00 34.06      C
ATOM  3502 CD  ARG A 443   46.103 -3.002 49.305 1.00 37.28      C
ATOM  3505 NE  ARG A 443   45.886 -2.830 50.750 1.00 39.82      N
ATOM  3507 CZ  ARG A 443   45.823 -3.816 51.652 1.00 41.09      C
ATOM  3508 NH1 ARG A 443   45.961 -5.094 51.303 1.00 40.52      N
ATOM  3511 NH2 ARG A 443   45.610 -3.505 52.932 1.00 42.23      N
ATOM  3514 C   ARG A 443   45.489 -3.617 45.211 1.00 30.54      C
ATOM  3515 O   ARG A 443   46.546 -4.267 45.211 1.00 30.72      O
ATOM  3516 N   LEU A 444   44.389 -4.038 44.596 1.00 30.38      N
ATOM  3518 CA  LEU A 444   44.412 -5.305 43.840 1.00 30.47      C
ATOM  3520 CB  LEU A 444   43.007 -5.927 43.708 1.00 30.45      C
ATOM  3523 CG  LEU A 444   41.844 -5.080 43.182 1.00 30.54      C
ATOM  3525 CD1 LEU A 444   41.765 -5.168 41.674 1.00 30.70      C
ATOM  3529 CD2 LEU A 444   40.541 -5.535 43.811 1.00 31.11      C
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| ATOM | 3533 | C | LEU A 444 | 45.100 | -5.161 | 42.472 | 1.00 | 30.14 | C |
|---|---|---|---|---|---|---|---|---|---|
| ATOM | 3534 | O | LEU A 444 | 45.595 | -6.144 | 41.931 | 1.00 | 30.25 | O |
| ATOM | 3535 | N | GLN A 445 | 45.160 | -3.937 | 41.941 | 1.00 | 29.84 | N |
| ATOM | 3537 | CA | GLN A 445 | 45.814 | -3.652 | 40.651 | 1.00 | 29.80 | C |
| ATOM | 3539 | CB | GLN A 445 | 45.078 | -2.484 | 39.986 | 1.00 | 30.05 | C |
| ATOM | 3542 | CG | GLN A 445 | 45.441 | -2.111 | 38.547 | 1.00 | 30.96 | C |
| ATOM | 3545 | CD | GLN A 445 | 44.927 | -0.707 | 38.194 | 1.00 | 33.36 | C |
| ATOM | 3546 | OE1 | GLN A 445 | 45.652 | 0.115 | 37.613 | 1.00 | 35.36 | O |
| ATOM | 3547 | NE2 | GLN A 445 | 43.686 | -0.426 | 38.575 | 1.00 | 33.42 | N |
| ATOM | 3550 | C | GLN A 445 | 47.331 | -3.356 | 40.801 | 1.00 | 29.48 | C |
| ATOM | 3551 | O | GLN A 445 | 47.991 | -2.911 | 39.847 | 1.00 | 29.37 | O |
| ATOM | 3552 | N | ASP A 446 | 47.883 | -3.632 | 41.988 | 1.00 | 28.99 | N |
| ATOM | 3554 | CA | ASP A 446 | 49.315 | -3.451 | 42.273 | 1.00 | 28.52 | C |
| ATOM | 3556 | CB | ASP A 446 | 50.162 | -4.386 | 41.389 | 1.00 | 28.74 | C |
| ATOM | 3559 | CG | ASP A 446 | 50.582 | -5.653 | 42.115 | 1.00 | 30.00 | C |
| ATOM | 3560 | OD1 | ASP A 446 | 51.055 | -5.551 | 43.270 | 1.00 | 31.05 | O |
| ATOM | 3561 | OD2 | ASP A 446 | 50.473 | -6.794 | 41.603 | 1.00 | 31.36 | O |
| ATOM | 3562 | C | ASP A 446 | 49.802 | -1.995 | 42.130 | 1.00 | 27.48 | C |
| ATOM | 3563 | O | ASP A 446 | 50.983 | -1.755 | 41.850 | 1.00 | 27.27 | O |
| ATOM | 3564 | N | LYS A 447 | 48.896 | -1.035 | 42.317 | 1.00 | 25.97 | N |
| ATOM | 3566 | CA | LYS A 447 | 49.236 | 0.379 | 42.194 | 1.00 | 25.34 | C |
| ATOM | 3568 | CB | LYS A 447 | 48.236 | 1.112 | 41.308 | 1.00 | 25.56 | C |
| ATOM | 3571 | CG | LYS A 447 | 48.791 | 1.476 | 39.941 | 1.00 | 27.42 | C |
| ATOM | 3574 | CD | LYS A 447 | 47.937 | 2.541 | 39.234 | 1.00 | 29.14 | C |
| ATOM | 3577 | CE | LYS A 447 | 48.324 | 2.703 | 37.756 | 1.00 | 29.77 | C |
| ATOM | 3580 | NZ | LYS A 447 | 49.794 | 2.489 | 37.525 | 1.00 | 29.95 | N |
| ATOM | 3584 | C | LYS A 447 | 49.281 | 1.012 | 43.574 | 1.00 | 24.20 | C |
| ATOM | 3585 | O | LYS A 447 | 48.264 | 1.073 | 44.273 | 1.00 | 24.40 | O |
| ATOM | 3586 | N | LYS A 448 | 50.465 | 1.479 | 43.961 | 1.00 | 22.65 | N |
| ATOM | 3588 | CA | LYS A 448 | 50.708 | 1.963 | 45.322 | 1.00 | 21.68 | C |
| ATOM | 3590 | CB | LYS A 448 | 52.132 | 1.609 | 45.769 | 1.00 | 22.05 | C |
| ATOM | 3593 | CG | LYS A 448 | 52.363 | 0.108 | 45.985 | 1.00 | 23.85 | C |
| ATOM | 3596 | CD | LYS A 448 | 51.620 | -0.402 | 47.242 | 1.00 | 25.90 | C |
| ATOM | 3599 | CE | LYS A 448 | 51.029 | -1.793 | 47.032 | 1.00 | 27.29 | C |
| ATOM | 3602 | NZ | LYS A 448 | 52.111 | -2.843 | 46.988 | 1.00 | 27.04 | N |
| ATOM | 3606 | C | LYS A 448 | 50.500 | 3.469 | 45.466 | 1.00 | 19.63 | C |
| ATOM | 3607 | O | LYS A 448 | 50.992 | 4.256 | 44.662 | 1.00 | 19.17 | O |
| ATOM | 3608 | N | LEU A 449 | 49.763 | 3.857 | 46.499 | 1.00 | 17.42 | N |
| ATOM | 3610 | CA | LEU A 449 | 49.747 | 5.246 | 46.931 | 1.00 | 16.08 | C |
| ATOM | 3612 | CB | LEU A 449 | 48.709 | 5.470 | 48.016 | 1.00 | 15.80 | C |
| ATOM | 3615 | CG | LEU A 449 | 47.276 | 5.187 | 47.620 | 1.00 | 15.59 | C |
| ATOM | 3617 | CD1 | LEU A 449 | 46.393 | 5.462 | 48.794 | 1.00 | 15.93 | C |
| ATOM | 3621 | CD2 | LEU A 449 | 46.889 | 6.042 | 46.441 | 1.00 | 16.59 | C |
| ATOM | 3625 | C | LEU A 449 | 51.119 | 5.609 | 47.497 | 1.00 | 14.86 | C |
| ATOM | 3626 | O | LEU A 449 | 51.716 | 4.819 | 48.213 | 1.00 | 14.21 | O |
| ATOM | 3627 | N | PRO A 450 | 51.602 | 6.815 | 47.207 | 1.00 | 13.64 | N |
| ATOM | 3628 | CA | PRO A 450 | 52.857 | 7.287 | 47.801 | 1.00 | 12.45 | C |
| ATOM | 3630 | CB | PRO A 450 | 53.097 | 8.619 | 47.106 | 1.00 | 12.02 | C |

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ATOM   3633 CG  PRO A 450    51.794  9.075 46.715 1.00 12.24        C
ATOM   3636 CD  PRO A 450    50.968  7.849 46.361 1.00 13.38        C
ATOM   3639 C   PRO A 450    52.651  7.451 49.305 1.00 11.44        C
ATOM   3640 O   PRO A 450    51.523  7.579 49.705 1.00 10.71        O
ATOM   3641 N   PRO A 451    53.691  7.370 50.114 1.00 11.43        N
ATOM   3642 CA  PRO A 451    53.554  7.354 51.579 1.00 11.97        C
ATOM   3644 CB  PRO A 451    55.004  7.498 52.056 1.00 11.99        C
ATOM   3647 CG  PRO A 451    55.826  6.908 50.950 1.00 11.22        C
ATOM   3650 CD  PRO A 451    55.096  7.221 49.693 1.00 11.32        C
ATOM   3653 C   PRO A 451    52.663  8.432 52.220 1.00 13.16        C
ATOM   3654 O   PRO A 451    51.988  8.113 53.182 1.00 14.07        O
ATOM   3655 N   LEU A 452    52.639  9.662 51.726 1.00 13.81        N
ATOM   3657 CA  LEU A 452    51.818 10.694 52.366 1.00 14.82        C
ATOM   3659 CB  LEU A 452    52.222 12.127 51.935 1.00 14.59        C
ATOM   3662 CG  LEU A 452    53.581 12.577 52.524 1.00 13.96        C
ATOM   3664 CD1 LEU A 452    54.136 13.827 51.798 1.00 12.67        C
ATOM   3668 CD2 LEU A 452    53.460 12.812 54.022 1.00 12.97        C
ATOM   3672 C   LEU A 452    50.339 10.461 52.119 1.00 15.67        C
ATOM   3673 O   LEU A 452    49.526 10.735 52.981 1.00 16.33        O
ATOM   3674 N   LEU A 453    49.980  9.984 50.940 1.00 16.51        N
ATOM   3676 CA  LEU A 453    48.589  9.584 50.700 1.00 16.83        C
ATOM   3678 CB  LEU A 453    48.316  9.473 49.200 1.00 16.80        C
ATOM   3681 CG  LEU A 453    48.492 10.799 48.488 1.00 16.52        C
ATOM   3683 CD1 LEU A 453    48.178 10.622 47.008 1.00 15.48        C
ATOM   3687 CD2 LEU A 453    47.607 11.881 49.149 1.00 15.08        C
ATOM   3691 C   LEU A 453    48.255  8.252 51.383 1.00 16.93        C
ATOM   3692 O   LEU A 453    47.164  8.076 51.892 1.00 15.52        O
ATOM   3693 N   SER A 454    49.218  7.338 51.433 1.00 17.80        N
ATOM   3695 CA  SER A 454    48.998  6.054 52.085 1.00 18.57        C
ATOM   3697 CB  SER A 454    50.234  5.177 52.002 1.00 18.79        C
ATOM   3700 OG  SER A 454    50.044  3.985 52.760 1.00 21.39        O
ATOM   3702 C   SER A 454    48.583  6.204 53.539 1.00 18.91        C
ATOM   3703 O   SER A 454    47.734  5.448 53.989 1.00 18.81        O
ATOM   3704 N   GLU A 455    49.181  7.165 54.252 1.00 19.47        N
ATOM   3706 CA  GLU A 455    48.911  7.434 55.674 1.00 20.61        C
ATOM   3708 CB  GLU A 455    49.792  8.600 56.226 1.00 20.80        C
ATOM   3711 CG  GLU A 455    51.133  8.200 56.856 1.00 22.89        C
ATOM   3714 CD  GLU A 455    52.067  9.397 57.206 1.00 24.58        C
ATOM   3715 OE1 GLU A 455    53.185  9.162 57.768 1.00 18.79        O
ATOM   3716 OE2 GLU A 455    51.687 10.571 56.909 1.00 25.06        O
ATOM   3717 C   GLU A 455    47.455  7.813 55.869 1.00 21.13        C
ATOM   3718 O   GLU A 455    46.915  7.648 56.942 1.00 20.97        O
ATOM   3719 N   ILE A 456    46.842  8.380 54.842 1.00 22.30        N
ATOM   3721 CA  ILE A 456    45.468  8.851 54.948 1.00 23.36        C
ATOM   3723 CB  ILE A 456    45.211 10.156 54.107 1.00 23.51        C
ATOM   3725 CG1 ILE A 456    46.271 11.223 54.348 1.00 24.04        C
ATOM   3728 CD1 ILE A 456    46.137 12.411 53.377 1.00 24.87        C
ATOM   3732 CG2 ILE A 456    43.862 10.788 54.457 1.00 23.80        C
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ATOM 3736 C   ILE A 456   44.460  7.772 54.552 1.00 23.95        C
ATOM 3737 O   ILE A 456   43.472  7.588 55.255 1.00 24.60        O
ATOM 3738 N   TRP A 457   44.715  7.054 53.460 1.00 24.49        N
ATOM 3740 CA  TRP A 457   43.686  6.274 52.788 1.00 25.10        C
ATOM 3742 CB  TRP A 457   43.581  6.757 51.352 1.00 24.61        C
ATOM 3745 CG  TRP A 457   43.172  8.173 51.286 1.00 24.27        C
ATOM 3746 CD1 TRP A 457   42.382  8.843 52.173 1.00 23.43        C
ATOM 3748 NE1 TRP A 457   42.225 10.146 51.774 1.00 23.31        N
ATOM 3750 CE2 TRP A 457   42.909 10.339 50.607 1.00 23.37        C
ATOM 3751 CD2 TRP A 457   43.513  9.113 50.268 1.00 24.59        C
ATOM 3752 CE3 TRP A 457   44.274  9.046 49.096 1.00 25.78        C
ATOM 3754 CZ3 TRP A 457   44.408 10.189 48.323 1.00 26.73        C
ATOM 3756 CH2 TRP A 457   43.796 11.396 48.698 1.00 24.85        C
ATOM 3758 CZ2 TRP A 457   43.053 11.489 49.833 1.00 24.21        C
ATOM 3760 C   TRP A 457   43.811  4.752 52.805 1.00 26.89        C
ATOM 3761 O   TRP A 457   42.804  4.056 52.578 1.00 26.84        O
ATOM 3762 N   ASP A 458   45.011  4.216 53.039 1.00 28.36        N
ATOM 3764 CA  ASP A 458   45.153  2.759 53.106 1.00 29.97        C
ATOM 3766 CB  ASP A 458   46.605  2.290 52.851 1.00 29.50        C
ATOM 3769 CG  ASP A 458   47.037  2.432 51.388 1.00 28.75        C
ATOM 3770 OD1 ASP A 458   46.194  2.287 50.471 1.00 25.80        O
ATOM 3771 OD2 ASP A 458   48.218  2.709 51.066 1.00 28.62        O
ATOM 3772 C   ASP A 458   44.668  2.262 54.471 1.00 31.78        C
ATOM 3773 O   ASP A 458   44.698  3.026 55.444 1.00 31.76        O
ATOM 3774 N   VAL A 459   44.229  0.994 54.538 1.00 33.72        N
ATOM 3776 CA  VAL A 459   43.925  0.350 55.829 1.00 35.18        C
ATOM 3778 CB  VAL A 459   42.776 -0.738 55.764 1.00 35.47        C
ATOM 3780 CG1 VAL A 459   41.402 -0.065 55.696 1.00 36.37        C
ATOM 3784 CG2 VAL A 459   42.954 -1.714 54.600 1.00 35.60        C
ATOM 3788 C   VAL A 459   45.207 -0.240 56.430 1.00 36.19        C
ATOM 3789 O   VAL A 459   46.053 -0.769 55.701 1.00 36.50        O
ATOM 3790 N   ALA A 460   45.338 -0.119 57.759 1.00 37.07        N
ATOM 3792 CA  ALA A 460   46.520 -0.567 58.513 1.00 37.34        C
ATOM 3794 CB  ALA A 460   46.663 -2.107 58.448 1.00 37.39        C
ATOM 3798 C   ALA A 460   47.805  0.130 58.048 1.00 37.43        C
ATOM 3799 O   ALA A 460   47.797  1.331 57.735 1.00 38.01        O
ATOM 3800 O37 GW3 A 500   45.928 22.483 41.966 1.00 29.37        O
ATOM 3801 C35 GW3 A 500   46.006 22.922 43.117 1.00 27.82        C
ATOM 3802 O36 GW3 A 500   46.154 24.137 43.352 1.00 30.11        O
ATOM 3803 C34 GW3 A 500   45.991 22.048 44.336 1.00 25.98        C
ATOM 3806 C32 GW3 A 500   45.090 20.843 44.120 1.00 24.26        C
ATOM 3807 C33 GW3 A 500   45.577 19.636 43.605 1.00 22.94        C
ATOM 3809 C31 GW3 A 500   43.729 20.985 44.385 1.00 22.24        C
ATOM 3811 C30 GW3 A 500   42.848 19.935 44.145 1.00 23.11        C
ATOM 3813 C29 GW3 A 500   43.333 18.734 43.634 1.00 22.63        C
ATOM 3815 C28 GW3 A 500   44.691 18.592 43.361 1.00 23.34        C
ATOM 3816 O27 GW3 A 500   45.145 17.397 42.893 1.00 23.88        O
ATOM 3817 C26 GW3 A 500   44.617 16.843 41.708 1.00 24.90        C
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ATOM  3820 C25 GW3 A 500    44.920 15.377 41.703 1.00 24.64    C
ATOM  3823 C17 GW3 A 500    44.100 14.679 40.630 1.00 24.72    C
ATOM  3826 N09 GW3 A 500    43.591 13.396 41.119 1.00 23.09    N
ATOM  3827 C16 GW3 A 500    44.504 12.521 41.826 1.00 27.47    C
ATOM  3830 C18 GW3 A 500    43.883 11.827 42.999 1.00 32.67    C
ATOM  3831 C19 GW3 A 500    44.086 10.381 43.132 1.00 37.17    C
ATOM  3832 CL4 GW3 A 500    45.046  9.500 41.913 1.00 48.91    CL
ATOM  3833 C23 GW3 A 500    43.138 12.498 43.950 1.00 33.22    C
ATOM  3835 C22 GW3 A 500    42.580 11.795 45.015 1.00 34.93    C
ATOM  3837 C21 GW3 A 500    42.742 10.415 45.175 1.00 37.10    C
ATOM  3839 C20 GW3 A 500    43.479  9.662 44.266 1.00 39.44    C
ATOM  3840 C39 GW3 A 500    43.672  8.164 44.368 1.00 41.02    C
ATOM  3841 F41 GW3 A 500    43.097  7.617 43.292 1.00 40.05    F
ATOM  3842 F40 GW3 A 500    43.146  7.681 45.481 1.00 42.09    F
ATOM  3843 F42 GW3 A 500    44.958  7.854 44.374 1.00 42.72    F
ATOM  3844 C08 GW3 A 500    42.341 12.851 40.595 1.00 20.89    C
ATOM  3847 C07 GW3 A 500    41.159 13.837 40.585 1.00 18.51    C
ATOM  3849 C01 GW3 A 500    40.117 13.455 39.587 1.00 17.88    C
ATOM  3850 C02 GW3 A 500    39.839 12.122 39.259 1.00 17.60    C
ATOM  3852 C03 GW3 A 500    38.864 11.795 38.318 1.00 17.52    C
ATOM  3854 C04 GW3 A 500    38.142 12.800 37.693 1.00 16.64    C
ATOM  3856 C05 GW3 A 500    38.428 14.125 37.997 1.00 17.54    C
ATOM  3858 C06 GW3 A 500    39.393 14.461 38.949 1.00 16.25    C
ATOM  3860 C10 GW3 A 500    40.562 13.938 41.935 1.00 18.44    C
ATOM  3861 C11 GW3 A 500    40.530 15.163 42.570 1.00 17.75    C
ATOM  3863 C12 GW3 A 500    39.978 15.260 43.843 1.00 19.18    C
ATOM  3865 C13 GW3 A 500    39.457 14.147 44.489 1.00 18.83    C
ATOM  3867 C14 GW3 A 500    39.502 12.905 43.858 1.00 19.46    C
ATOM  3869 C15 GW3 A 500    40.038 12.811 42.572 1.00 19.27    C
ATOM  3871 O4  IOH A 501    41.801 25.834 49.973 1.00 47.81    O
ATOM  3873 C2  IOH A 501    42.137 25.218 51.196 1.00 45.49    C
ATOM  3875 C3  IOH A 501    40.900 24.618 51.845 1.00 46.17    C
ATOM  3879 C1  IOH A 501    43.140 24.140 50.870 1.00 45.25    C
ATOM  3883 N   LEU B 220     1.952 28.417 56.409 1.00 20.12    N
ATOM  3885 CA  LEU B 220     2.004 27.365 55.326 1.00 20.40    C
ATOM  3887 CB  LEU B 220     1.870 25.949 55.891 1.00 20.67    C
ATOM  3890 CG  LEU B 220     2.969 25.326 56.771 1.00 22.03    C
ATOM  3892 CD1 LEU B 220     2.525 23.974 57.322 1.00 22.13    C
ATOM  3896 CD2 LEU B 220     4.275 25.170 56.045 1.00 22.68    C
ATOM  3900 C   LEU B 220     0.888 27.586 54.308 1.00 19.67    C
ATOM  3901 O   LEU B 220    -0.198 27.978 54.679 1.00 19.18    O
ATOM  3904 N   THR B 221     1.161 27.322 53.035 1.00 19.13    N
ATOM  3906 CA  THR B 221     0.118 27.358 52.008 1.00 18.93    C
ATOM  3908 CB  THR B 221     0.721 27.418 50.597 1.00 19.02    C
ATOM  3910 OG1 THR B 221     1.595 26.293 50.362 1.00 15.73    O
ATOM  3912 CG2 THR B 221     1.623 28.643 50.447 1.00 19.21    C
ATOM  3916 C   THR B 221    -0.784 26.126 52.103 1.00 19.37    C
ATOM  3917 O   THR B 221    -0.438 25.144 52.736 1.00 19.29    O
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| ATOM | 3918 | N   | ALA B 222 | -1.940 26.185 51.461 | 1.00 19.97 | N |
|------|------|-----|-----------|----------------------|------------|---|
| ATOM | 3920 | CA  | ALA B 222 | -2.853 25.055 51.450 | 1.00 20.36 | C |
| ATOM | 3922 | CB  | ALA B 222 | -4.114 25.374 50.664 | 1.00 20.25 | C |
| ATOM | 3926 | C   | ALA B 222 | -2.142 23.870 50.844 | 1.00 20.59 | C |
| ATOM | 3927 | O   | ALA B 222 | -2.277 22.766 51.330 | 1.00 20.50 | O |
| ATOM | 3928 | N   | ALA B 223 | -1.358 24.128 49.803 | 1.00 20.84 | N |
| ATOM | 3930 | CA  | ALA B 223 | -0.660 23.080 49.060 | 1.00 21.31 | C |
| ATOM | 3932 | CB  | ALA B 223 | -0.020 23.660 47.810 | 1.00 21.51 | C |
| ATOM | 3936 | C   | ALA B 223 | 0.407 22.397 49.885 | 1.00 21.16 | C |
| ATOM | 3937 | O   | ALA B 223 | 0.601 21.211 49.747 | 1.00 21.87 | O |
| ATOM | 3938 | N   | GLN B 224 | 1.112 23.153 50.717 | 1.00 20.73 | N |
| ATOM | 3940 | CA  | GLN B 224 | 2.102 22.585 51.614 | 1.00 20.66 | C |
| ATOM | 3942 | CB  | GLN B 224 | 2.996 23.683 52.217 | 1.00 20.60 | C |
| ATOM | 3945 | CG  | GLN B 224 | 3.888 24.368 51.165 | 1.00 21.61 | C |
| ATOM | 3948 | CD  | GLN B 224 | 4.685 25.571 51.698 | 1.00 20.35 | C |
| ATOM | 3949 | OE1 | GLN B 224 | 4.233 26.288 52.592 | 1.00 20.73 | O |
| ATOM | 3950 | NE2 | GLN B 224 | 5.874 25.774 51.147 | 1.00 18.48 | N |
| ATOM | 3953 | C   | GLN B 224 | 1.424 21.766 52.709 | 1.00 20.54 | C |
| ATOM | 3954 | O   | GLN B 224 | 1.925 20.722 53.076 | 1.00 20.39 | O |
| ATOM | 3955 | N   | GLU B 225 | 0.319 22.261 53.253 | 1.00 20.45 | N |
| ATOM | 3957 | CA  | GLU B 225 | -0.474 21.489 54.209 | 1.00 21.68 | C |
| ATOM | 3959 | CB  | GLU B 225 | -1.603 22.355 54.810 | 1.00 22.26 | C |
| ATOM | 3962 | CG  | GLU B 225 | -1.091 23.506 55.700 | 1.00 24.57 | C |
| ATOM | 3965 | CD  | GLU B 225 | -2.190 24.430 56.226 | 1.00 28.84 | C |
| ATOM | 3966 | OE1 | GLU B 225 | -3.390 24.145 56.006 | 1.00 30.04 | O |
| ATOM | 3967 | OE2 | GLU B 225 | -1.856 25.452 56.894 | 1.00 32.32 | O |
| ATOM | 3968 | C   | GLU B 225 | -1.021 20.178 53.568 | 1.00 21.44 | C |
| ATOM | 3969 | O   | GLU B 225 | -0.821 19.102 54.102 | 1.00 21.30 | O |
| ATOM | 3970 | N   | LEU B 226 | -1.645 20.268 52.398 | 1.00 21.09 | N |
| ATOM | 3972 | CA  | LEU B 226 | -2.087 19.082 51.680 | 1.00 21.40 | C |
| ATOM | 3974 | CB  | LEU B 226 | -2.688 19.425 50.307 | 1.00 20.97 | C |
| ATOM | 3977 | CG  | LEU B 226 | -3.452 18.233 49.725 | 1.00 21.69 | C |
| ATOM | 3979 | CD1 | LEU B 226 | -4.473 17.665 50.726 | 1.00 20.99 | C |
| ATOM | 3983 | CD2 | LEU B 226 | -4.165 18.624 48.450 | 1.00 23.12 | C |
| ATOM | 3987 | C   | LEU B 226 | -0.966 18.076 51.485 | 1.00 21.71 | C |
| ATOM | 3988 | O   | LEU B 226 | -1.132 16.897 51.756 | 1.00 22.24 | O |
| ATOM | 3989 | N   | MET B 227 | 0.177 18.564 51.031 | 1.00 21.92 | N |
| ATOM | 3991 | CA  | MET B 227 | 1.344 17.740 50.806 | 1.00 22.54 | C |
| ATOM | 3993 | CB  | MET B 227 | 2.477 18.599 50.227 | 1.00 23.18 | C |
| ATOM | 3996 | CG  | MET B 227 | 3.889 18.099 50.497 | 1.00 27.64 | C |
| ATOM | 3999 | SD  | MET B 227 | 5.252 19.110 49.731 | 1.00 35.04 | S |
| ATOM | 4000 | CE  | MET B 227 | 4.355 20.407 48.801 | 1.00 35.00 | C |
| ATOM | 4004 | C   | MET B 227 | 1.775 16.978 52.062 | 1.00 21.43 | C |
| ATOM | 4005 | O   | MET B 227 | 2.044 15.787 52.001 | 1.00 20.48 | O |
| ATOM | 4006 | N   | ILE B 228 | 1.837 17.667 53.197 | 1.00 21.11 | N |
| ATOM | 4008 | CA  | ILE B 228 | 2.226 17.033 54.454 | 1.00 20.70 | C |
| ATOM | 4010 | CB  | ILE B 228 | 2.454 18.094 55.552 | 1.00 20.51 | C |
| ATOM | 4012 | CG1 | ILE B 228 | 3.753 18.863 55.279 | 1.00 21.99 | C |

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ATOM  4015 CD1 ILE B 228    3.752 20.289 55.826 1.00 21.87    C
ATOM  4019 CG2 ILE B 228    2.541 17.450 56.925 1.00 19.69    C
ATOM  4023 C   ILE B 228    1.155 16.000 54.882 1.00 20.68    C
ATOM  4024 O   ILE B 228    1.489 14.904 55.320 1.00 20.06    O
ATOM  4025 N   GLN B 229   -0.120 16.359 54.753 1.00 20.09    N
ATOM  4027 CA  GLN B 229   -1.194 15.446 55.120 1.00 20.97    C
ATOM  4029 CB  GLN B 229   -2.574 16.126 54.993 1.00 20.90    C
ATOM  4032 CG  GLN B 229   -2.829 17.199 56.034 1.00 22.03    C
ATOM  4035 CD  GLN B 229   -3.907 18.235 55.593 1.00 27.82    C
ATOM  4036 OE1 GLN B 229   -4.472 18.124 54.487 1.00 32.18    O
ATOM  4037 NE2 GLN B 229   -4.176 19.235 56.444 1.00 24.45    N
ATOM  4040 C   GLN B 229   -1.126 14.146 54.299 1.00 20.36    C
ATOM  4041 O   GLN B 229   -1.277 13.080 54.870 1.00 20.51    O
ATOM  4042 N   GLN B 230   -0.836 14.247 52.998 1.00 19.95    N
ATOM  4044 CA  GLN B 230   -0.678 13.092 52.094 1.00 19.76    C
ATOM  4046 CB  GLN B 230   -0.423 13.577 50.638 1.00 19.71    C
ATOM  4049 CG  GLN B 230   -1.657 14.211 49.988 1.00 20.96    C
ATOM  4052 CD  GLN B 230   -1.489 14.710 48.537 1.00 24.54    C
ATOM  4053 OE1 GLN B 230   -2.232 14.269 47.640 1.00 28.47    O
ATOM  4054 NE2 GLN B 230   -0.596 15.686 48.323 1.00 23.65    N
ATOM  4057 C   GLN B 230    0.439 12.125 52.530 1.00 19.30    C
ATOM  4058 O   GLN B 230    0.288 10.889 52.504 1.00 19.78    O
ATOM  4059 N   LEU B 231    1.562 12.691 52.926 1.00 18.21    N
ATOM  4061 CA  LEU B 231    2.728 11.909 53.291 1.00 17.41    C
ATOM  4063 CB  LEU B 231    3.978 12.788 53.441 1.00 16.81    C
ATOM  4066 CG  LEU B 231    4.473 13.501 52.207 1.00 15.74    C
ATOM  4068 CD1 LEU B 231    5.667 14.324 52.595 1.00 16.14    C
ATOM  4072 CD2 LEU B 231    4.849 12.533 51.189 1.00 17.07    C
ATOM  4076 C   LEU B 231    2.491 11.257 54.610 1.00 17.15    C
ATOM  4077 O   LEU B 231    2.894 10.119 54.802 1.00 16.91    O
ATOM  4078 N   VAL B 232    1.890 12.003 55.531 1.00 16.61    N
ATOM  4080 CA  VAL B 232    1.615 11.498 56.860 1.00 16.91    C
ATOM  4082 CB  VAL B 232    1.132 12.631 57.800 1.00 16.52    C
ATOM  4084 CG1 VAL B 232    0.611 12.073 59.141 1.00 15.82    C
ATOM  4088 CG2 VAL B 232    2.270 13.587 58.082 1.00 17.23    C
ATOM  4092 C   VAL B 232    0.579 10.348 56.799 1.00 17.56    C
ATOM  4093 O   VAL B 232    0.771  9.307 57.429 1.00 17.67    O
ATOM  4094 N   ALA B 233   -0.505 10.557 56.048 1.00 17.49    N
ATOM  4096 CA  ALA B 233   -1.572  9.562 55.883 1.00 17.46    C
ATOM  4098 CB  ALA B 233   -2.721 10.162 55.063 1.00 16.78    C
ATOM  4102 C   ALA B 233   -1.045  8.277 55.203 1.00 18.02    C
ATOM  4103 O   ALA B 233   -1.456  7.197 55.546 1.00 18.54    O
ATOM  4104 N   ALA B 234   -0.128  8.412 54.251 1.00 18.75    N
ATOM  4106 CA  ALA B 234    0.418  7.274 53.515 1.00 19.67    C
ATOM  4108 CB  ALA B 234    1.181  7.751 52.301 1.00 19.31    C
ATOM  4112 C   ALA B 234    1.348  6.486 54.439 1.00 20.55    C
ATOM  4113 O   ALA B 234    1.357  5.267 54.472 1.00 22.00    O
ATOM  4114 N   GLN B 235    2.096  7.204 55.225 1.00 21.28    N
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| ATOM | 4116 | CA  | GLN B 235 | 2.897  | 6.606  | 56.244 | 1.00 | 22.64 | C |
| ATOM | 4118 | CB  | GLN B 235 | 3.687  | 7.686  | 56.962 | 1.00 | 23.12 | C |
| ATOM | 4121 | CG  | GLN B 235 | 4.873  | 7.175  | 57.721 | 1.00 | 26.16 | C |
| ATOM | 4124 | CD  | GLN B 235 | 6.154  | 7.982  | 57.483 | 1.00 | 27.08 | C |
| ATOM | 4125 | OE1 | GLN B 235 | 6.198  | 9.190  | 57.778 | 1.00 | 25.27 | O |
| ATOM | 4126 | NE2 | GLN B 235 | 7.225  | 7.288  | 57.050 | 1.00 | 25.11 | N |
| ATOM | 4129 | C   | GLN B 235 | 2.029  | 5.838  | 57.215 | 1.00 | 23.05 | C |
| ATOM | 4130 | O   | GLN B 235 | 2.374  | 4.719  | 57.590 | 1.00 | 23.98 | O |
| ATOM | 4131 | N   | LEU B 236 | 0.886  | 6.400  | 57.590 | 1.00 | 22.82 | N |
| ATOM | 4133 | CA  | LEU B 236 | 0.026  | 5.735  | 58.538 | 1.00 | 23.20 | C |
| ATOM | 4135 | CB  | LEU B 236 | -1.076 | 6.680  | 59.060 | 1.00 | 23.47 | C |
| ATOM | 4138 | CG  | LEU B 236 | -1.770 | 6.162  | 60.325 | 1.00 | 24.46 | C |
| ATOM | 4140 | CD1 | LEU B 236 | -0.990 | 6.692  | 61.552 | 1.00 | 25.96 | C |
| ATOM | 4144 | CD2 | LEU B 236 | -3.250 | 6.563  | 60.375 | 1.00 | 24.55 | C |
| ATOM | 4148 | C   | LEU B 236 | -0.597 | 4.450  | 57.954 | 1.00 | 22.92 | C |
| ATOM | 4149 | O   | LEU B 236 | -0.760 | 3.489  | 58.692 | 1.00 | 22.71 | O |
| ATOM | 4150 | N   | GLN B 237 | -0.947 | 4.434  | 56.666 | 1.00 | 22.75 | N |
| ATOM | 4152 | CA  | GLN B 237 | -1.416 | 3.199  | 56.016 | 1.00 | 23.39 | C |
| ATOM | 4154 | CB  | GLN B 237 | -1.772 | 3.419  | 54.546 | 1.00 | 23.78 | C |
| ATOM | 4157 | CG  | GLN B 237 | -3.182 | 3.902  | 54.251 | 1.00 | 25.91 | C |
| ATOM | 4160 | CD  | GLN B 237 | -3.594 | 3.668  | 52.779 | 1.00 | 28.07 | C |
| ATOM | 4161 | OE1 | GLN B 237 | -2.728 | 3.480  | 51.913 | 1.00 | 31.17 | O |
| ATOM | 4162 | NE2 | GLN B 237 | -4.901 | 3.668  | 52.504 | 1.00 | 26.41 | N |
| ATOM | 4165 | C   | GLN B 237 | -0.301 | 2.154  | 56.082 | 1.00 | 23.26 | C |
| ATOM | 4166 | O   | GLN B 237 | -0.547 | 0.993  | 56.381 | 1.00 | 22.61 | O |
| ATOM | 4167 | N   | CYS B 238 | 0.936  | 2.576  | 55.819 | 1.00 | 23.37 | N |
| ATOM | 4169 | CA  | CYS B 238 | 2.079  | 1.666  | 55.937 | 1.00 | 23.62 | C |
| ATOM | 4171 | CB  | CYS B 238 | 3.377  | 2.350  | 55.486 | 1.00 | 23.38 | C |
| ATOM | 4174 | SG  | CYS B 238 | 3.308  | 2.714  | 53.694 | 1.00 | 26.27 | S |
| ATOM | 4175 | C   | CYS B 238 | 2.187  | 1.057  | 57.353 | 1.00 | 23.48 | C |
| ATOM | 4176 | O   | CYS B 238 | 2.440  | -0.130 | 57.474 | 1.00 | 22.84 | O |
| ATOM | 4177 | N   | ASN B 239 | 1.959  | 1.856  | 58.402 | 1.00 | 23.18 | N |
| ATOM | 4179 | CA  | ASN B 239 | 2.044  | 1.368  | 59.776 | 1.00 | 23.64 | C |
| ATOM | 4181 | CB  | ASN B 239 | 1.873  | 2.490  | 60.821 | 1.00 | 23.36 | C |
| ATOM | 4184 | CG  | ASN B 239 | 2.940  | 3.576  | 60.740 | 1.00 | 23.70 | C |
| ATOM | 4185 | OD1 | ASN B 239 | 4.021  | 3.372  | 60.189 | 1.00 | 26.52 | O |
| ATOM | 4186 | ND2 | ASN B 239 | 2.632  | 4.745  | 61.293 | 1.00 | 18.94 | N |
| ATOM | 4189 | C   | ASN B 239 | 0.948  | 0.334  | 60.019 | 1.00 | 24.56 | C |
| ATOM | 4190 | O   | ASN B 239 | 1.210  | -0.709 | 60.599 | 1.00 | 24.51 | O |
| ATOM | 4191 | N   | LYS B 240 | -0.281 | 0.633  | 59.593 | 1.00 | 25.29 | N |
| ATOM | 4193 | CA  | LYS B 240 | -1.400 | -0.308 | 59.742 | 1.00 | 26.55 | C |
| ATOM | 4195 | CB  | LYS B 240 | -2.705 | 0.280  | 59.158 | 1.00 | 27.30 | C |
| ATOM | 4198 | CG  | LYS B 240 | -3.245 | 1.536  | 59.894 | 1.00 | 29.04 | C |
| ATOM | 4201 | CD  | LYS B 240 | -4.709 | 1.862  | 59.503 | 1.00 | 32.61 | C |
| ATOM | 4204 | CE  | LYS B 240 | -4.870 | 2.417  | 58.053 | 1.00 | 34.49 | C |
| ATOM | 4207 | NZ  | LYS B 240 | -4.339 | 3.837  | 57.829 | 1.00 | 34.32 | N |
| ATOM | 4211 | C   | LYS B 240 | -1.090 | -1.680 | 59.104 | 1.00 | 26.09 | C |
| ATOM | 4212 | O   | LYS B 240 | -1.430 | -2.707 | 59.653 | 1.00 | 26.05 | O |

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ATOM  4213 N   ARG B 241   -0.396 -1.681 57.975 1.00 26.26    N
ATOM  4215 CA  ARG B 241    0.019 -2.911 57.288 1.00 26.59    C
ATOM  4217 CB  ARG B 241    0.645 -2.542 55.944 1.00 27.45    C
ATOM  4220 CG  ARG B 241    0.621 -3.619 54.921 1.00 30.60    C
ATOM  4223 CD  ARG B 241    1.824 -3.649 54.026 1.00 35.87    C
ATOM  4226 NE  ARG B 241    2.384 -5.002 53.975 1.00 41.15    N
ATOM  4228 CZ  ARG B 241    3.592 -5.301 53.511 1.00 43.64    C
ATOM  4229 NH1 ARG B 241    4.386 -4.361 53.019 1.00 43.07    N
ATOM  4232 NH2 ARG B 241    3.996 -6.562 53.534 1.00 46.66    N
ATOM  4235 C   ARG B 241    1.019 -3.733 58.111 1.00 25.70    C
ATOM  4236 O   ARG B 241    0.880 -4.944 58.249 1.00 26.52    O
ATOM  4237 N   SER B 242    2.023 -3.057 58.644 1.00 24.82    N
ATOM  4239 CA  SER B 242    2.947 -3.599 59.646 1.00 24.42    C
ATOM  4241 CB  SER B 242    3.849 -2.472 60.199 1.00 24.32    C
ATOM  4244 OG  SER B 242    4.828 -2.071 59.273 1.00 23.14    O
ATOM  4246 C   SER B 242    2.251 -4.249 60.847 1.00 24.21    C
ATOM  4247 O   SER B 242    2.718 -5.265 61.345 1.00 23.74    O
ATOM  4248 N   PHE B 243    1.179 -3.633 61.339 1.00 24.47    N
ATOM  4250 CA  PHE B 243    0.472 -4.161 62.511 1.00 25.38    C
ATOM  4252 CB  PHE B 243   -0.588 -3.201 63.095 1.00 25.27    C
ATOM  4255 CG  PHE B 243   -0.056 -1.848 63.543 1.00 26.76    C
ATOM  4256 CD1 PHE B 243   -0.953 -0.824 63.854 1.00 28.25    C
ATOM  4258 CE1 PHE B 243   -0.501  0.431 64.255 1.00 29.25    C
ATOM  4260 CZ  PHE B 243    0.873  0.685 64.347 1.00 28.33    C
ATOM  4262 CE2 PHE B 243    1.771 -0.317 64.058 1.00 27.74    C
ATOM  4264 CD2 PHE B 243    1.312 -1.580 63.654 1.00 27.96    C
ATOM  4266 C   PHE B 243   -0.211 -5.443 62.070 1.00 25.24    C
ATOM  4267 O   PHE B 243   -0.099 -6.440 62.748 1.00 25.43    O
ATOM  4268 N   SER B 244   -0.878 -5.392 60.916 1.00 25.73    N
ATOM  4270 CA  SER B 244   -1.553 -6.548 60.280 1.00 26.24    C
ATOM  4272 CB  SER B 244   -2.224 -6.123 58.967 1.00 26.59    C
ATOM  4275 OG  SER B 244   -3.539 -5.700 59.225 1.00 28.45    O
ATOM  4277 C   SER B 244   -0.670 -7.738 59.934 1.00 25.30    C
ATOM  4278 O   SER B 244   -1.139 -8.852 59.904 1.00 26.13    O
ATOM  4279 N   ASP B 245    0.593 -7.498 59.658 1.00 24.75    N
ATOM  4281 CA  ASP B 245    1.488 -8.568 59.255 1.00 24.52    C
ATOM  4283 CB  ASP B 245    2.363 -8.103 58.062 1.00 24.71    C
ATOM  4286 CG  ASP B 245    1.541 -7.759 56.829 1.00 25.49    C
ATOM  4287 OD1 ASP B 245    0.384 -8.228 56.688 1.00 28.15    O
ATOM  4288 OD2 ASP B 245    1.975 -7.013 55.941 1.00 30.97    O
ATOM  4289 C   ASP B 245    2.371 -9.044 60.410 1.00 23.74    C
ATOM  4290 O   ASP B 245    3.103 -10.035 60.246 1.00 23.57    O
ATOM  4291 N   GLN B 246    2.321 -8.354 61.560 1.00 22.64    N
ATOM  4293 CA  GLN B 246    3.081 -8.802 62.730 1.00 21.91    C
ATOM  4295 CB  GLN B 246    2.906 -7.887 63.958 1.00 21.50    C
ATOM  4298 CG  GLN B 246    3.515 -8.497 65.234 1.00 19.68    C
ATOM  4301 CD  GLN B 246    3.629 -7.541 66.413 1.00 18.64    C
ATOM  4302 OE1 GLN B 246    4.209 -6.458 66.312 1.00 15.04    O
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| ATOM | 4303 | NE2 | GLN B 246 | 3.123 | -7.972 | 67.550 | 1.00 18.09 | N |
|------|------|-----|-----------|-------|--------|--------|-------------|---|
| ATOM | 4306 | C   | GLN B 246 | 2.759 | -10.257 | 63.072 | 1.00 22.12 | C |
| ATOM | 4307 | O   | GLN B 246 | 3.675 | -11.022 | 63.322 | 1.00 22.39 | O |
| ATOM | 4308 | N   | PRO B 247 | 1.480 | -10.653 | 63.073 | 1.00 22.38 | N |
| ATOM | 4309 | CA  | PRO B 247 | 1.110 | -12.056 | 63.298 | 1.00 22.33 | C |
| ATOM | 4311 | CB  | PRO B 247 | -0.421 | -12.017 | 63.286 | 1.00 22.35 | C |
| ATOM | 4314 | CG  | PRO B 247 | -0.801 | -10.623 | 63.451 | 1.00 22.68 | C |
| ATOM | 4317 | CD  | PRO B 247 | 0.283 | -9.814 | 62.878 | 1.00 22.40 | C |
| ATOM | 4320 | C   | PRO B 247 | 1.582 | -13.077 | 62.254 | 1.00 22.55 | C |
| ATOM | 4321 | O   | PRO B 247 | 1.449 | -14.277 | 62.506 | 1.00 22.98 | O |
| ATOM | 4322 | N   | LYS B 248 | 2.061 | -12.626 | 61.103 | 1.00 23.24 | N |
| ATOM | 4324 | CA  | LYS B 248 | 2.555 | -13.502 | 60.031 | 1.00 23.63 | C |
| ATOM | 4326 | CB  | LYS B 248 | 2.325 | -12.814 | 58.674 | 1.00 24.19 | C |
| ATOM | 4329 | CG  | LYS B 248 | 0.825 | -12.666 | 58.302 | 1.00 25.17 | C |
| ATOM | 4332 | CD  | LYS B 248 | 0.664 | -12.261 | 56.816 | 1.00 27.89 | C |
| ATOM | 4335 | CE  | LYS B 248 | -0.704 | -11.655 | 56.518 | 1.00 29.11 | C |
| ATOM | 4338 | NZ  | LYS B 248 | -0.874 | -10.310 | 57.134 | 1.00 29.48 | N |
| ATOM | 4342 | C   | LYS B 248 | 4.044 | -13.869 | 60.171 | 1.00 23.57 | C |
| ATOM | 4343 | O   | LYS B 248 | 4.521 | -14.818 | 59.538 | 1.00 22.55 | O |
| ATOM | 4344 | N   | VAL B 249 | 4.766 | -13.095 | 60.996 | 1.00 24.05 | N |
| ATOM | 4346 | CA  | VAL B 249 | 6.222 | -13.193 | 61.132 | 1.00 23.94 | C |
| ATOM | 4348 | CB  | VAL B 249 | 6.834 | -11.902 | 61.761 | 1.00 24.05 | C |
| ATOM | 4350 | CG1 | VAL B 249 | 8.364 | -12.060 | 62.013 | 1.00 23.37 | C |
| ATOM | 4354 | CG2 | VAL B 249 | 6.554 | -10.705 | 60.878 | 1.00 23.82 | C |
| ATOM | 4358 | C   | VAL B 249 | 6.572 | -14.385 | 62.003 | 1.00 24.33 | C |
| ATOM | 4359 | O   | VAL B 249 | 5.925 | -14.623 | 63.033 | 1.00 24.36 | O |
| ATOM | 4360 | N   | THR B 250 | 7.584 | -15.135 | 61.555 | 1.00 24.50 | N |
| ATOM | 4362 | CA  | THR B 250 | 8.104 | -16.291 | 62.274 | 1.00 24.40 | C |
| ATOM | 4364 | CB  | THR B 250 | 9.238 | -16.936 | 61.466 | 1.00 24.53 | C |
| ATOM | 4366 | OG1 | THR B 250 | 8.783 | -17.193 | 60.132 | 1.00 25.59 | O |
| ATOM | 4368 | CG2 | THR B 250 | 9.596 | -18.319 | 62.011 | 1.00 23.78 | C |
| ATOM | 4372 | C   | THR B 250 | 8.635 | -15.806 | 63.616 | 1.00 24.13 | C |
| ATOM | 4373 | O   | THR B 250 | 9.579 | -15.004 | 63.650 | 1.00 23.96 | O |
| ATOM | 4374 | N   | PRO B 251 | 8.027 | -16.266 | 64.712 | 1.00 23.65 | N |
| ATOM | 4375 | CA  | PRO B 251 | 8.389 | -15.781 | 66.054 | 1.00 23.24 | C |
| ATOM | 4377 | CB  | PRO B 251 | 7.638 | -16.744 | 66.998 | 1.00 23.24 | C |
| ATOM | 4380 | CG  | PRO B 251 | 6.496 | -17.284 | 66.199 | 1.00 23.40 | C |
| ATOM | 4383 | CD  | PRO B 251 | 6.946 | -17.275 | 64.765 | 1.00 23.90 | C |
| ATOM | 4386 | C   | PRO B 251 | 9.889 | -15.829 | 66.350 | 1.00 22.61 | C |
| ATOM | 4387 | O   | PRO B 251 | 10.600 | -16.720 | 65.874 | 1.00 22.38 | O |
| ATOM | 4388 | N   | TRP B 252 | 10.347 | -14.866 | 67.135 | 1.00 22.13 | N |
| ATOM | 4390 | CA  | TRP B 252 | 11.705 | -14.860 | 67.651 | 1.00 22.14 | C |
| ATOM | 4392 | CB  | TRP B 252 | 11.899 | -13.608 | 68.505 | 1.00 21.80 | C |
| ATOM | 4395 | CG  | TRP B 252 | 13.280 | -13.365 | 69.064 | 1.00 19.35 | C |
| ATOM | 4396 | CD1 | TRP B 252 | 13.701 | -13.617 | 70.338 | 1.00 16.85 | C |
| ATOM | 4398 | NE1 | TRP B 252 | 15.005 | -13.221 | 70.495 | 1.00 14.85 | N |
| ATOM | 4400 | CE2 | TRP B 252 | 15.451 | -12.683 | 69.319 | 1.00 14.93 | C |
| ATOM | 4401 | CD2 | TRP B 252 | 14.390 | -12.753 | 68.395 | 1.00 16.95 | C |

| ATOM | 4402 | CE3 | TRP B 252 | 14.595 | -12.244 | 67.100 | 1.00 | 16.75 | C |
| ATOM | 4404 | CZ3 | TRP B 252 | 15.838 | -11.734 | 66.770 | 1.00 | 13.87 | C |
| ATOM | 4406 | CH2 | TRP B 252 | 16.863 | -11.685 | 67.712 | 1.00 | 13.95 | C |
| ATOM | 4408 | CZ2 | TRP B 252 | 16.692 | -12.150 | 68.991 | 1.00 | 13.78 | C |
| ATOM | 4410 | C | TRP B 252 | 11.902 | -16.099 | 68.503 | 1.00 | 23.31 | C |
| ATOM | 4411 | O | TRP B 252 | 10.997 | -16.473 | 69.256 | 1.00 | 23.18 | O |
| ATOM | 4412 | N | PRO B 253 | 13.053 | -16.756 | 68.383 | 1.00 | 24.63 | N |
| ATOM | 4413 | CA | PRO B 253 | 13.362 | -17.882 | 69.266 | 1.00 | 25.77 | C |
| ATOM | 4415 | CB | PRO B 253 | 14.642 | -18.475 | 68.665 | 1.00 | 25.66 | C |
| ATOM | 4418 | CG | PRO B 253 | 15.268 | -17.362 | 67.947 | 1.00 | 25.34 | C |
| ATOM | 4421 | CD | PRO B 253 | 14.138 | -16.502 | 67.421 | 1.00 | 24.81 | C |
| ATOM | 4424 | C | PRO B 253 | 13.591 | -17.385 | 70.693 | 1.00 | 26.95 | C |
| ATOM | 4425 | O | PRO B 253 | 14.543 | -16.622 | 70.941 | 1.00 | 27.00 | O |
| ATOM | 4426 | N | LEU B 254 | 12.663 | -17.746 | 71.581 | 1.00 | 28.19 | N |
| ATOM | 4428 | CA | LEU B 254 | 12.812 | -17.553 | 73.013 | 1.00 | 29.17 | C |
| ATOM | 4430 | CB | LEU B 254 | 11.518 | -17.075 | 73.660 | 1.00 | 29.19 | C |
| ATOM | 4433 | CG | LEU B 254 | 11.083 | -15.687 | 73.198 | 1.00 | 30.29 | C |
| ATOM | 4435 | CD1 | LEU B 254 | 9.836 | -15.774 | 72.315 | 1.00 | 30.93 | C |
| ATOM | 4439 | CD2 | LEU B 254 | 10.857 | -14.748 | 74.388 | 1.00 | 31.32 | C |
| ATOM | 4443 | C | LEU B 254 | 13.120 | -18.933 | 73.450 | 1.00 | 29.93 | C |
| ATOM | 4444 | O | LEU B 254 | 12.266 | -19.616 | 74.003 | 1.00 | 30.33 | O |
| ATOM | 4445 | N | GLY B 255 | 14.323 | -19.372 | 73.113 | 1.00 | 31.10 | N |
| ATOM | 4447 | CA | GLY B 255 | 14.742 | -20.728 | 73.390 | 1.00 | 32.10 | C |
| ATOM | 4450 | C | GLY B 255 | 15.677 | -20.662 | 74.568 | 1.00 | 33.02 | C |
| ATOM | 4451 | O | GLY B 255 | 16.004 | -19.558 | 75.026 | 1.00 | 33.20 | O |
| ATOM | 4452 | N | ALA B 256 | 16.126 | -21.821 | 75.052 | 1.00 | 33.82 | N |
| ATOM | 4454 | CA | ALA B 256 | 17.270 | -21.843 | 75.961 | 1.00 | 34.52 | C |
| ATOM | 4456 | CB | ALA B 256 | 17.765 | -23.266 | 76.194 | 1.00 | 34.47 | C |
| ATOM | 4460 | C | ALA B 256 | 18.410 | -20.942 | 75.423 | 1.00 | 35.19 | C |
| ATOM | 4461 | O | ALA B 256 | 19.374 | -20.677 | 76.153 | 1.00 | 35.52 | O |
| ATOM | 4462 | N | ASP B 257 | 18.295 | -20.484 | 74.163 | 1.00 | 35.55 | N |
| ATOM | 4464 | CA | ASP B 257 | 19.240 | -19.535 | 73.568 | 1.00 | 36.08 | C |
| ATOM | 4466 | CB | ASP B 257 | 19.051 | -18.129 | 74.211 | 1.00 | 36.12 | C |
| ATOM | 4469 | CG | ASP B 257 | 20.329 | -17.281 | 74.251 | 1.00 | 36.27 | C |
| ATOM | 4470 | OD1 | ASP B 257 | 20.545 | -16.443 | 73.345 | 1.00 | 35.49 | O |
| ATOM | 4471 | OD2 | ASP B 257 | 21.155 | -17.350 | 75.190 | 1.00 | 36.08 | O |
| ATOM | 4472 | C | ASP B 257 | 20.634 | -20.154 | 73.750 | 1.00 | 36.42 | C |
| ATOM | 4473 | O | ASP B 257 | 21.530 | -19.540 | 74.339 | 1.00 | 36.88 | O |
| ATOM | 4474 | N | PRO B 258 | 20.816 | -21.387 | 73.252 | 1.00 | 36.48 | N |
| ATOM | 4475 | CA | PRO B 258 | 21.956 | -22.221 | 73.671 | 1.00 | 36.39 | C |
| ATOM | 4477 | CB | PRO B 258 | 21.489 | -23.661 | 73.344 | 1.00 | 36.32 | C |
| ATOM | 4480 | CG | PRO B 258 | 20.159 | -23.524 | 72.607 | 1.00 | 36.44 | C |
| ATOM | 4483 | CD | PRO B 258 | 20.002 | -22.072 | 72.228 | 1.00 | 36.58 | C |
| ATOM | 4486 | C | PRO B 258 | 23.279 | -21.888 | 72.959 | 1.00 | 36.22 | C |
| ATOM | 4487 | O | PRO B 258 | 24.207 | -22.713 | 72.995 | 1.00 | 36.30 | O |
| ATOM | 4488 | N | GLN B 259 | 23.353 | -20.699 | 72.348 | 1.00 | 35.91 | N |
| ATOM | 4490 | CA | GLN B 259 | 24.514 | -20.251 | 71.572 | 1.00 | 35.69 | C |
| ATOM | 4492 | CB | GLN B 259 | 25.704 | -19.958 | 72.490 | 1.00 | 35.83 | C |

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ATOM  4495  CG  GLN B 259    25.427 -18.774 73.430 1.00 36.12      C
ATOM  4498  CD  GLN B 259    25.495 -19.144 74.896 1.00 35.62      C
ATOM  4499  OE1 GLN B 259    25.270 -20.297 75.275 1.00 35.62      O
ATOM  4500  NE2 GLN B 259    25.799 -18.162 75.729 1.00 35.86      N
ATOM  4503  C   GLN B 259    24.842 -21.283 70.497 1.00 34.89      C
ATOM  4504  O   GLN B 259    25.984 -21.750 70.364 1.00 35.10      O
ATOM  4505  N   SER B 260    23.791 -21.640 69.762 1.00 33.52      N
ATOM  4507  CA  SER B 260    23.855 -22.620 68.699 1.00 32.46      C
ATOM  4509  CB  SER B 260    22.708 -23.628 68.833 1.00 32.56      C
ATOM  4512  OG  SER B 260    21.448 -22.968 68.777 1.00 32.50      O
ATOM  4514  C   SER B 260    23.748 -21.883 67.374 1.00 31.34      C
ATOM  4515  O   SER B 260    23.240 -20.759 67.309 1.00 30.83      O
ATOM  4516  N   ALA B 261    24.237 -22.540 66.329 1.00 30.11      N
ATOM  4518  CA  ALA B 261    24.208 -22.016 64.972 1.00 29.32      C
ATOM  4520  CB  ALA B 261    25.044 -22.920 64.061 1.00 29.26      C
ATOM  4524  C   ALA B 261    22.770 -21.897 64.443 1.00 28.44      C
ATOM  4525  O   ALA B 261    22.459 -21.018 63.645 1.00 28.46      O
ATOM  4526  N   ASP B 262    21.898 -22.778 64.918 1.00 27.37      N
ATOM  4528  CA  ASP B 262    20.532 -22.883 64.411 1.00 26.27      C
ATOM  4530  CB  ASP B 262    19.888 -24.175 64.952 1.00 26.40      C
ATOM  4533  CG  ASP B 262    19.008 -24.859 63.934 1.00 27.38      C
ATOM  4534  OD1 ASP B 262    18.418 -24.150 63.085 1.00 29.79      O
ATOM  4535  OD2 ASP B 262    18.851 -26.101 63.908 1.00 28.42      O
ATOM  4536  C   ASP B 262    19.673 -21.674 64.791 1.00 24.73      C
ATOM  4537  O   ASP B 262    18.939 -21.145 63.969 1.00 24.75      O
ATOM  4538  N   ALA B 263    19.774 -21.260 66.048 1.00 23.14      N
ATOM  4540  CA  ALA B 263    18.944 -20.202 66.599 1.00 22.15      C
ATOM  4542  CB  ALA B 263    18.957 -20.275 68.119 1.00 22.02      C
ATOM  4546  C   ALA B 263    19.414 -18.823 66.125 1.00 21.47      C
ATOM  4547  O   ALA B 263    18.620 -17.889 66.022 1.00 21.01      O
ATOM  4548  N   ARG B 264    20.709 -18.702 65.845 1.00 20.63      N
ATOM  4550  CA  ARG B 264    21.258 -17.489 65.256 1.00 20.10      C
ATOM  4552  CB  ARG B 264    22.775 -17.604 65.155 1.00 20.12      C
ATOM  4555  CG  ARG B 264    23.494 -16.291 65.024 1.00 20.98      C
ATOM  4558  CD  ARG B 264    24.813 -16.375 64.286 1.00 23.02      C
ATOM  4561  NE  ARG B 264    25.699 -17.411 64.823 1.00 25.21      N
ATOM  4563  CZ  ARG B 264    26.969 -17.588 64.463 1.00 27.21      C
ATOM  4564  NH1 ARG B 264    27.546 -16.798 63.559 1.00 29.00      N
ATOM  4567  NH2 ARG B 264    27.673 -18.560 65.011 1.00 28.37      N
ATOM  4570  C   ARG B 264    20.650 -17.277 63.872 1.00 19.30      C
ATOM  4571  O   ARG B 264    20.258 -16.174 63.528 1.00 18.85      O
ATOM  4572  N   GLN B 265    20.575 -18.347 63.088 1.00 18.93      N
ATOM  4574  CA  GLN B 265    19.962 -18.292 61.753 1.00 18.74      C
ATOM  4576  CB  GLN B 265    20.125 -19.639 61.019 1.00 18.95      C
ATOM  4579  CG  GLN B 265    19.433 -19.732 59.638 1.00 20.26      C
ATOM  4582  CD  GLN B 265    19.893 -18.661 58.646 1.00 22.64      C
ATOM  4583  OE1 GLN B 265    21.032 -18.702 58.167 1.00 25.12      O
ATOM  4584  NE2 GLN B 265    19.007 -17.709 58.329 1.00 22.08      N
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ATOM  4587  C   GLN B 265    18.488 -17.927 61.836  1.00 17.60        C
ATOM  4588  O   GLN B 265    17.977 -17.266 60.955  1.00 16.14        O
ATOM  4589  N   GLN B 266    17.824 -18.391 62.900  1.00 17.56        N
ATOM  4591  CA  GLN B 266    16.400 -18.156 63.125  1.00 17.35        C
ATOM  4593  CB  GLN B 266    15.840 -19.078 64.220  1.00 17.65        C
ATOM  4596  CG  GLN B 266    14.968 -20.222 63.691  1.00 19.14        C
ATOM  4599  CD  GLN B 266    14.811 -21.357 64.688  1.00 21.41        C
ATOM  4600  OE1 GLN B 266    14.589 -21.119 65.882  1.00 23.11        O
ATOM  4601  NE2 GLN B 266    14.943 -22.593 64.210  1.00 22.10        N
ATOM  4604  C   GLN B 266    16.187 -16.694 63.471  1.00 16.86        C
ATOM  4605  O   GLN B 266    15.277 -16.067 62.947  1.00 16.83        O
ATOM  4606  N   ARG B 267    17.060 -16.129 64.297  1.00 16.43        N
ATOM  4608  CA  ARG B 267    16.993 -14.688 64.582  1.00 16.37        C
ATOM  4610  CB  ARG B 267    18.019 -14.294 65.636  1.00 16.42        C
ATOM  4613  CG  ARG B 267    17.745 -14.848 67.025  1.00 17.67        C
ATOM  4616  CD  ARG B 267    18.814 -14.433 68.007  1.00 19.76        C
ATOM  4619  NE  ARG B 267    18.716 -15.140 69.269  1.00 23.24        N
ATOM  4621  CZ  ARG B 267    19.565 -16.072 69.689  1.00 24.98        C
ATOM  4622  NH1 ARG B 267    20.611 -16.436 68.947  1.00 25.98        N
ATOM  4625  NH2 ARG B 267    19.363 -16.658 70.864  1.00 24.91        N
ATOM  4628  C   ARG B 267    17.199 -13.830 63.324  1.00 15.95        C
ATOM  4629  O   ARG B 267    16.438 -12.891 63.066  1.00 14.76        O
ATOM  4630  N   PHE B 268    18.236 -14.169 62.554  1.00 15.75        N
ATOM  4632  CA  PHE B 268    18.576 -13.453 61.332  1.00 15.52        C
ATOM  4634  CB  PHE B 268    19.848 -14.018 60.714  1.00 15.76        C
ATOM  4637  CG  PHE B 268    20.221 -13.377 59.413  1.00 18.35        C
ATOM  4638  CD1 PHE B 268    20.871 -12.145 59.387  1.00 20.04        C
ATOM  4640  CE1 PHE B 268    21.209 -11.558 58.182  1.00 19.94        C
ATOM  4642  CZ  PHE B 268    20.886 -12.196 56.979  1.00 20.77        C
ATOM  4644  CE2 PHE B 268    20.242 -13.402 56.991  1.00 20.76        C
ATOM  4646  CD2 PHE B 268    19.904 -13.994 58.202  1.00 20.40        C
ATOM  4648  C   PHE B 268    17.426 -13.531 60.349  1.00 14.78        C
ATOM  4649  O   PHE B 268    17.014 -12.527 59.817  1.00 15.24        O
ATOM  4650  N   ALA B 269    16.887 -14.721 60.136  1.00 14.47        N
ATOM  4652  CA  ALA B 269    15.734 -14.913 59.251  1.00 13.87        C
ATOM  4654  CB  ALA B 269    15.363 -16.406 59.185  1.00 13.62        C
ATOM  4658  C   ALA B 269    14.525 -14.089 59.692  1.00 13.39        C
ATOM  4659  O   ALA B 269    13.875 -13.476 58.866  1.00 13.14        O
ATOM  4660  N   HIS B 270    14.231 -14.088 60.992  1.00 13.45        N
ATOM  4662  CA  HIS B 270    13.147 -13.280 61.567  1.00 13.97        C
ATOM  4664  CB  HIS B 270    13.043 -13.562 63.081  1.00 14.07        C
ATOM  4667  CG  HIS B 270    12.230 -12.560 63.854  1.00 15.14        C
ATOM  4668  ND1 HIS B 270    10.972 -12.842 64.354  1.00 17.36        N
ATOM  4670  CE1 HIS B 270    10.509 -11.792 65.010  1.00 15.22        C
ATOM  4672  NE2 HIS B 270    11.426 -10.842 64.962  1.00 16.27        N
ATOM  4674  CD2 HIS B 270    12.517 -11.302 64.262  1.00 14.66        C
ATOM  4676  C   HIS B 270    13.371 -11.766 61.258  1.00 14.16        C
ATOM  4677  O   HIS B 270    12.450 -11.036 60.865  1.00 13.52        O
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ATOM   4678  N   PHE B 271      14.606 -11.312 61.398  1.00 14.37        N
ATOM   4680  CA  PHE B 271      14.938  -9.950 61.014  1.00 15.70        C
ATOM   4682  CB  PHE B 271      16.350  -9.577 61.477  1.00 15.92        C
ATOM   4685  CG  PHE B 271      16.438  -9.153 62.936  1.00 17.25        C
ATOM   4686  CD1 PHE B 271      15.458  -8.373 63.527  1.00 18.99        C
ATOM   4688  CE1 PHE B 271      15.570  -7.977 64.852  1.00 18.97        C
ATOM   4690  CZ  PHE B 271      16.657  -8.352 65.600  1.00 18.58        C
ATOM   4692  CE2 PHE B 271      17.632  -9.115 65.030  1.00 19.00        C
ATOM   4694  CD2 PHE B 271      17.520  -9.517 63.700  1.00 18.47        C
ATOM   4696  C   PHE B 271      14.783  -9.695 59.505  1.00 16.17        C
ATOM   4697  O   PHE B 271      14.345  -8.598 59.103  1.00 16.51        O
ATOM   4698  N   THR B 272      15.112 -10.679 58.662  1.00 15.92        N
ATOM   4700  CA  THR B 272      15.001 -10.440 57.229  1.00 15.60        C
ATOM   4702  CB  THR B 272      15.661 -11.557 56.360  1.00 15.19        C
ATOM   4704  OG1 THR B 272      15.064 -12.828 56.621  1.00 15.06        O
ATOM   4706  CG2 THR B 272      17.137 -11.762 56.702  1.00 14.81        C
ATOM   4710  C   THR B 272      13.521 -10.231 56.881  1.00 16.01        C
ATOM   4711  O   THR B 272      13.219  -9.511 55.943  1.00 16.04        O
ATOM   4712  N   GLU B 273      12.607 -10.837 57.645  1.00 16.31        N
ATOM   4714  CA  GLU B 273      11.168 -10.707 57.389  1.00 16.91        C
ATOM   4716  CB  GLU B 273      10.392 -11.783 58.155  1.00 17.59        C
ATOM   4719  CG  GLU B 273      10.741 -13.200 57.716  1.00 19.28        C
ATOM   4722  CD  GLU B 273       9.899 -14.259 58.396  1.00 22.41        C
ATOM   4723  OE1 GLU B 273      10.308 -15.457 58.416  1.00 22.79        O
ATOM   4724  OE2 GLU B 273       8.823 -13.892 58.916  1.00 25.21        O
ATOM   4725  C   GLU B 273      10.635  -9.325 57.752  1.00 17.10        C
ATOM   4726  O   GLU B 273       9.854  -8.736 57.001  1.00 17.36        O
ATOM   4727  N   LEU B 274      11.059  -8.789 58.901  1.00 17.58        N
ATOM   4729  CA  LEU B 274      10.823  -7.373 59.181  1.00 17.80        C
ATOM   4731  CB  LEU B 274      11.429  -6.921 60.502  1.00 17.99        C
ATOM   4734  CG  LEU B 274      10.954  -7.596 61.795  1.00 19.69        C
ATOM   4736  CD1 LEU B 274      11.232  -6.739 63.002  1.00 18.59        C
ATOM   4740  CD2 LEU B 274       9.485  -8.001 61.738  1.00 21.65        C
ATOM   4744  C   LEU B 274      11.330  -6.488 58.052  1.00 17.31        C
ATOM   4745  O   LEU B 274      10.626  -5.603 57.639  1.00 17.76        O
ATOM   4746  N   ALA B 275      12.524  -6.743 57.539  1.00 17.48        N
ATOM   4748  CA  ALA B 275      13.124  -5.906 56.467  1.00 17.61        C
ATOM   4750  CB  ALA B 275      14.604  -6.314 56.187  1.00 17.30        C
ATOM   4754  C   ALA B 275      12.318  -6.012 55.193  1.00 17.19        C
ATOM   4755  O   ALA B 275      12.125  -5.025 54.507  1.00 16.75        O
ATOM   4756  N   ILE B 276      11.826  -7.213 54.911  1.00 17.43        N
ATOM   4758  CA  ILE B 276      11.006  -7.449 53.737  1.00 17.71        C
ATOM   4760  CB  ILE B 276      10.719  -8.928 53.574  1.00 17.62        C
ATOM   4762  CG1 ILE B 276      11.942  -9.601 52.945  1.00 18.32        C
ATOM   4765  CD1 ILE B 276      11.872 -11.116 52.939  1.00 18.55        C
ATOM   4769  CG2 ILE B 276       9.473  -9.168 52.682  1.00 16.70        C
ATOM   4773  C   ILE B 276       9.721  -6.663 53.873  1.00 18.56        C
ATOM   4774  O   ILE B 276       9.284  -6.018 52.911  1.00 19.96        O
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ATOM  4775  N   ILE B 277    9.119 -6.696 55.058 1.00 18.40        N
ATOM  4777  CA  ILE B 277    7.925 -5.909 55.283 1.00 18.33        C
ATOM  4779  CB  ILE B 277    7.373 -6.111 56.683 1.00 18.46        C
ATOM  4781  CG1 ILE B 277    6.690 -7.475 56.763 1.00 19.14        C
ATOM  4784  CD1 ILE B 277    6.360 -7.874 58.165 1.00 20.33        C
ATOM  4788  CG2 ILE B 277    6.358 -5.040 57.058 1.00 17.80        C
ATOM  4792  C   ILE B 277    8.207 -4.447 55.013 1.00 18.33        C
ATOM  4793  O   ILE B 277    7.402 -3.795 54.374 1.00 18.06        O
ATOM  4794  N   SER B 278    9.332 -3.920 55.494 1.00 18.03        N
ATOM  4796  CA  SER B 278    9.593 -2.492 55.342 1.00 18.30        C
ATOM  4798  CB  SER B 278   10.753 -2.052 56.225 1.00 18.70        C
ATOM  4801  OG  SER B 278   10.934 -0.637 56.159 1.00 18.72        O
ATOM  4803  C   SER B 278    9.911 -2.168 53.879 1.00 18.90        C
ATOM  4804  O   SER B 278    9.466 -1.177 53.357 1.00 19.41        O
ATOM  4805  N   VAL B 279   10.680 -3.012 53.206 1.00 19.42        N
ATOM  4807  CA  VAL B 279   11.012 -2.720 51.823 1.00 19.96        C
ATOM  4809  CB  VAL B 279   12.030 -3.732 51.247 1.00 19.75        C
ATOM  4811  CG1 VAL B 279   12.083 -3.671 49.709 1.00 17.20        C
ATOM  4815  CG2 VAL B 279   13.388 -3.489 51.874 1.00 18.66        C
ATOM  4819  C   VAL B 279    9.728 -2.646 50.988 1.00 20.32        C
ATOM  4820  O   VAL B 279    9.595 -1.771 50.172 1.00 20.05        O
ATOM  4821  N   GLN B 280    8.789 -3.558 51.201 1.00 21.26        N
ATOM  4823  CA  GLN B 280    7.540 -3.519 50.447 1.00 21.95        C
ATOM  4825  CB  GLN B 280    6.728 -4.769 50.683 1.00 22.34        C
ATOM  4828  CG  GLN B 280    7.296 -5.958 49.972 1.00 25.42        C
ATOM  4831  CD  GLN B 280    6.595 -7.256 50.299 1.00 28.38        C
ATOM  4832  OE1 GLN B 280    5.971 -7.390 51.352 1.00 29.60        O
ATOM  4833  NE2 GLN B 280    6.699 -8.227 49.387 1.00 29.80        N
ATOM  4836  C   GLN B 280    6.717 -2.270 50.765 1.00 22.09        C
ATOM  4837  O   GLN B 280    6.164 -1.671 49.849 1.00 22.73        O
ATOM  4838  N   GLU B 281    6.651 -1.856 52.034 1.00 21.59        N
ATOM  4840  CA  GLU B 281    5.911 -0.637 52.394 1.00 21.72        C
ATOM  4842  CB  GLU B 281    5.853 -0.428 53.910 1.00 21.87        C
ATOM  4845  CG  GLU B 281    5.049 -1.473 54.655 1.00 22.25        C
ATOM  4848  CD  GLU B 281    5.202 -1.371 56.171 1.00 21.71        C
ATOM  4849  OE1 GLU B 281    5.975 -0.509 56.668 1.00 17.81        O
ATOM  4850  OE2 GLU B 281    4.529 -2.164 56.865 1.00 19.03        O
ATOM  4851  C   GLU B 281    6.531  0.603 51.745 1.00 21.36        C
ATOM  4852  O   GLU B 281    5.816  1.473 51.300 1.00 20.72        O
ATOM  4853  N   ILE B 282    7.860  0.669 51.696 1.00 21.78        N
ATOM  4855  CA  ILE B 282    8.579  1.799 51.062 1.00 22.00        C
ATOM  4857  CB  ILE B 282   10.080  1.695 51.321 1.00 21.32        C
ATOM  4859  CG1 ILE B 282   10.371  2.117 52.750 1.00 21.12        C
ATOM  4862  CD1 ILE B 282   11.700  1.678 53.247 1.00 22.57        C
ATOM  4866  CG2 ILE B 282   10.872  2.584 50.387 1.00 21.98        C
ATOM  4870  C   ILE B 282    8.268  1.956 49.556 1.00 22.01        C
ATOM  4871  O   ILE B 282    8.086  3.063 49.090 1.00 21.16        O
ATOM  4872  N   VAL B 283    8.220  0.843 48.829 1.00 22.96        N
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ATOM   4874 CA  VAL B 283      7.785  0.790 47.429 1.00 23.47        C
ATOM   4876 CB  VAL B 283      7.700 -0.694 46.911 1.00 24.31        C
ATOM   4878 CG1 VAL B 283      6.896 -0.801 45.603 1.00 23.97        C
ATOM   4882 CG2 VAL B 283      9.083 -1.331 46.734 1.00 24.06        C
ATOM   4886 C   VAL B 283      6.390  1.409 47.316 1.00 23.71        C
ATOM   4887 O   VAL B 283      6.188  2.338 46.552 1.00 24.05        O
ATOM   4888 N   ASP B 284      5.429  0.919 48.096 1.00 23.71        N
ATOM   4890 CA  ASP B 284      4.066  1.492 48.091 1.00 23.80        C
ATOM   4892 CB  ASP B 284      3.112  0.675 48.960 1.00 24.45        C
ATOM   4895 CG  ASP B 284      2.905 -0.718 48.428 1.00 26.79        C
ATOM   4896 OD1 ASP B 284      2.521 -1.580 49.242 1.00 32.73        O
ATOM   4897 OD2 ASP B 284      3.115 -1.036 47.237 1.00 26.84        O
ATOM   4898 C   ASP B 284      3.993  2.935 48.557 1.00 22.85        C
ATOM   4899 O   ASP B 284      3.293  3.733 47.975 1.00 23.18        O
ATOM   4900 N   PHE B 285      4.699  3.276 49.611 1.00 21.83        N
ATOM   4902 CA  PHE B 285      4.708  4.665 50.043 1.00 21.89        C
ATOM   4904 CB  PHE B 285      5.583  4.818 51.275 1.00 21.24        C
ATOM   4907 CG  PHE B 285      5.789  6.228 51.707 1.00 20.61        C
ATOM   4908 CD1 PHE B 285      4.854  6.870 52.493 1.00 20.19        C
ATOM   4910 CE1 PHE B 285      5.056  8.153 52.915 1.00 18.83        C
ATOM   4912 CZ  PHE B 285      6.207  8.810 52.548 1.00 19.67        C
ATOM   4914 CE2 PHE B 285      7.155  8.168 51.776 1.00 18.93        C
ATOM   4916 CD2 PHE B 285      6.949  6.894 51.379 1.00 20.46        C
ATOM   4918 C   PHE B 285      5.181  5.603 48.924 1.00 21.93        C
ATOM   4919 O   PHE B 285      4.623  6.663 48.736 1.00 21.82        O
ATOM   4920 N   ALA B 286      6.185  5.202 48.163 1.00 22.60        N
ATOM   4922 CA  ALA B 286      6.797  6.117 47.195 1.00 23.49        C
ATOM   4924 CB  ALA B 286      8.104  5.573 46.675 1.00 23.96        C
ATOM   4928 C   ALA B 286      5.844  6.475 46.050 1.00 23.30        C
ATOM   4929 O   ALA B 286      5.882  7.594 45.549 1.00 21.88        O
ATOM   4930 N   LYS B 287      4.969  5.547 45.682 1.00 24.38        N
ATOM   4932 CA  LYS B 287      3.907  5.836 44.705 1.00 25.52        C
ATOM   4934 CB  LYS B 287      3.044  4.604 44.349 1.00 26.06        C
ATOM   4937 CG  LYS B 287      3.732  3.240 44.182 1.00 28.53        C
ATOM   4940 CD  LYS B 287      4.511  3.082 42.883 1.00 31.79        C
ATOM   4943 CE  LYS B 287      4.644  1.579 42.414 1.00 32.44        C
ATOM   4946 NZ  LYS B 287      3.774  0.604 43.161 1.00 31.88        N
ATOM   4950 C   LYS B 287      2.934  6.917 45.179 1.00 25.60        C
ATOM   4951 O   LYS B 287      2.231  7.510 44.362 1.00 25.69        O
ATOM   4952 N   GLN B 288      2.845  7.102 46.499 1.00 25.59        N
ATOM   4954 CA  GLN B 288      1.929  8.052 47.129 1.00 25.14        C
ATOM   4956 CB  GLN B 288      1.466  7.533 48.507 1.00 24.91        C
ATOM   4959 CG  GLN B 288      0.625  6.276 48.456 1.00 25.08        C
ATOM   4962 CD  GLN B 288     -0.648  6.436 47.620 1.00 27.43        C
ATOM   4963 OE1 GLN B 288     -1.299  7.491 47.660 1.00 29.70        O
ATOM   4964 NE2 GLN B 288     -0.981  5.418 46.833 1.00 24.98        N
ATOM   4967 C   GLN B 288      2.576  9.409 47.326 1.00 24.85        C
ATOM   4968 O   GLN B 288      1.890 10.361 47.686 1.00 25.19        O
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ATOM  4969  N   VAL B 289    3.893  9.489 47.135 1.00 24.19      N
ATOM  4971  CA  VAL B 289    4.621 10.739 47.252 1.00 23.51      C
ATOM  4973  CB  VAL B 289    6.150 10.518 47.404 1.00 23.87      C
ATOM  4975  CG1 VAL B 289    6.874 11.843 47.503 1.00 24.01      C
ATOM  4979  CG2 VAL B 289    6.457  9.714 48.670 1.00 23.94      C
ATOM  4983  C   VAL B 289    4.368 11.570 46.014 1.00 23.42      C
ATOM  4984  O   VAL B 289    4.770 11.169 44.914 1.00 23.53      O
ATOM  4985  N   PRO B 290    3.707 12.725 46.161 1.00 22.39      N
ATOM  4986  CA  PRO B 290    3.448 13.592 45.005 1.00 21.62      C
ATOM  4988  CB  PRO B 290    2.856 14.866 45.649 1.00 22.00      C
ATOM  4991  CG  PRO B 290    2.174 14.361 46.864 1.00 21.47      C
ATOM  4994  CD  PRO B 290    3.116 13.283 47.391 1.00 22.05      C
ATOM  4997  C   PRO B 290    4.688 13.901 44.168 1.00 20.84      C
ATOM  4998  O   PRO B 290    5.726 14.371 44.658 1.00 21.04      O
ATOM  4999  N   GLY B 291    4.569 13.619 42.879 1.00 19.91      N
ATOM  5001  CA  GLY B 291    5.663 13.767 41.951 1.00 18.79      C
ATOM  5004  C   GLY B 291    6.398 12.474 41.612 1.00 18.26      C
ATOM  5005  O   GLY B 291    7.054 12.382 40.585 1.00 18.74      O
ATOM  5006  N   PHE B 292    6.351 11.464 42.455 1.00 17.97      N
ATOM  5008  CA  PHE B 292    7.223 10.316 42.204 1.00 17.81      C
ATOM  5010  CB  PHE B 292    7.147  9.314 43.346 1.00 17.81      C
ATOM  5013  CG  PHE B 292    8.097  8.164 43.218 1.00 15.70      C
ATOM  5014  CD1 PHE B 292    9.436  8.339 43.477 1.00 14.75      C
ATOM  5016  CE1 PHE B 292   10.322  7.306 43.370 1.00 12.99      C
ATOM  5018  CZ  PHE B 292    9.868  6.065 43.025 1.00 15.22      C
ATOM  5020  CE2 PHE B 292    8.518  5.855 42.754 1.00 14.12      C
ATOM  5022  CD2 PHE B 292    7.641  6.910 42.864 1.00 14.10      C
ATOM  5024  C   PHE B 292    6.834  9.652 40.900 1.00 18.05      C
ATOM  5025  O   PHE B 292    7.695  9.244 40.133 1.00 17.83      O
ATOM  5026  N   LEU B 293    5.527  9.585 40.640 1.00 19.39      N
ATOM  5028  CA  LEU B 293    5.001  8.887 39.456 1.00 19.72      C
ATOM  5030  CB  LEU B 293    3.526  8.460 39.652 1.00 19.64      C
ATOM  5033  CG  LEU B 293    3.268  7.255 40.598 1.00 19.21      C
ATOM  5035  CD1 LEU B 293    1.807  6.829 40.550 1.00 16.19      C
ATOM  5039  CD2 LEU B 293    4.197  6.054 40.297 1.00 17.72      C
ATOM  5043  C   LEU B 293    5.207  9.630 38.130 1.00 19.37      C
ATOM  5044  O   LEU B 293    5.014  9.058 37.080 1.00 19.61      O
ATOM  5045  N   GLN B 294    5.622 10.884 38.193 1.00 20.20      N
ATOM  5047  CA  GLN B 294    5.975 11.664 37.008 1.00 21.50      C
ATOM  5049  CB  GLN B 294    5.966 13.183 37.332 1.00 22.59      C
ATOM  5052  CG  GLN B 294    4.564 13.821 37.595 1.00 27.10      C
ATOM  5055  CD  GLN B 294    4.654 15.198 38.308 1.00 33.39      C
ATOM  5056  OE1 GLN B 294    5.554 16.012 38.022 1.00 38.40      O
ATOM  5057  NE2 GLN B 294    3.721 15.449 39.237 1.00 37.44      N
ATOM  5060  C   GLN B 294    7.368 11.312 36.468 1.00 21.10      C
ATOM  5061  O   GLN B 294    7.672 11.635 35.314 1.00 21.09      O
ATOM  5062  N   LEU B 295    8.238 10.703 37.289 1.00 19.82      N
ATOM  5064  CA  LEU B 295    9.543 10.261 36.788 1.00 19.71      C
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ATOM   5066  CB   LEU B 295    10.538   9.970  37.924  1.00 20.43        C
ATOM   5069  CG   LEU B 295    10.846  11.084  38.906  1.00 21.71        C
ATOM   5071  CD1  LEU B 295    11.603  10.523  40.085  1.00 23.72        C
ATOM   5075  CD2  LEU B 295    11.615  12.198  38.214  1.00 23.91        C
ATOM   5079  C    LEU B 295     9.337   9.012  35.972  1.00 18.12        C
ATOM   5080  O    LEU B 295     8.359   8.281  36.192  1.00 18.00        O
ATOM   5081  N    GLY B 296    10.224   8.785  35.011  1.00 17.34        N
ATOM   5083  CA   GLY B 296    10.260   7.531  34.259  1.00 17.08        C
ATOM   5086  C    GLY B 296    10.459   6.338  35.181  1.00 16.81        C
ATOM   5087  O    GLY B 296    10.996   6.491  36.251  1.00 16.26        O
ATOM   5088  N    ARG B 297     9.991   5.157  34.797  1.00 17.84        N
ATOM   5090  CA   ARG B 297    10.085   3.999  35.679  1.00 18.97        C
ATOM   5092  CB   ARG B 297     9.340   2.765  35.152  1.00 19.44        C
ATOM   5095  CG   ARG B 297     9.369   1.623  36.191  1.00 25.58        C
ATOM   5098  CD   ARG B 297     8.029   0.943  36.521  1.00 33.49        C
ATOM   5101  NE   ARG B 297     8.213  -0.388  37.146  1.00 38.59        N
ATOM   5103  CZ   ARG B 297     8.667  -1.484  36.503  1.00 40.41        C
ATOM   5104  NH1  ARG B 297     8.988  -1.443  35.217  1.00 40.97        N
ATOM   5107  NH2  ARG B 297     8.799  -2.639  37.158  1.00 41.67        N
ATOM   5110  C    ARG B 297    11.533   3.615  36.020  1.00 17.76        C
ATOM   5111  O    ARG B 297    11.780   3.095  37.094  1.00 16.79        O
ATOM   5112  N    GLU B 298    12.470   3.863  35.117  1.00 17.36        N
ATOM   5114  CA   GLU B 298    13.872   3.510  35.382  1.00 17.32        C
ATOM   5116  CB   GLU B 298    14.722   3.476  34.100  1.00 17.52        C
ATOM   5119  CG   GLU B 298    14.462   2.202  33.275  1.00 18.16        C
ATOM   5122  CD   GLU B 298    15.096   2.207  31.886  1.00 21.18        C
ATOM   5123  OE1  GLU B 298    15.119   3.301  31.259  1.00 22.69        O
ATOM   5124  OE2  GLU B 298    15.581   1.121  31.428  1.00 18.63        O
ATOM   5125  C    GLU B 298    14.476   4.392  36.465  1.00 17.16        C
ATOM   5126  O    GLU B 298    15.283   3.896  37.245  1.00 17.40        O
ATOM   5127  N    ASP B 299    14.053   5.653  36.563  1.00 16.22        N
ATOM   5129  CA   ASP B 299    14.505   6.534  37.640  1.00 16.84        C
ATOM   5131  CB   ASP B 299    14.263   7.996  37.279  1.00 17.23        C
ATOM   5134  CG   ASP B 299    15.325   8.571  36.351  1.00 19.38        C
ATOM   5135  OD1  ASP B 299    16.320   7.892  36.011  1.00 18.73        O
ATOM   5136  OD2  ASP B 299    15.225   9.726  35.892  1.00 23.85        O
ATOM   5137  C    ASP B 299    13.812   6.266  39.012  1.00 16.95        C
ATOM   5138  O    ASP B 299    14.425   6.447  40.047  1.00 15.53        O
ATOM   5139  N    GLN B 300    12.533   5.891  39.000  1.00 16.90        N
ATOM   5141  CA   GLN B 300    11.806   5.454  40.191  1.00 16.81        C
ATOM   5143  CB   GLN B 300    10.405   4.978  39.804  1.00 16.86        C
ATOM   5146  CG   GLN B 300     9.455   6.063  39.266  1.00 17.75        C
ATOM   5149  CD   GLN B 300     8.125   5.493  38.770  1.00 16.43        C
ATOM   5150  OE1  GLN B 300     7.711   4.452  39.234  1.00 16.78        O
ATOM   5151  NE2  GLN B 300     7.472   6.175  37.817  1.00 13.03        N
ATOM   5154  C    GLN B 300    12.556   4.277  40.822  1.00 17.48        C
ATOM   5155  O    GLN B 300    12.809   4.251  42.021  1.00 16.85        O
ATOM   5156  N    ILE B 301    12.898   3.303  39.988  1.00 17.63        N
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| ATOM | 5158 | CA | ILE B 301 | 13.665 | 2.145 | 40.401 | 1.00 | 18.03 | C |
| ATOM | 5160 | CB | ILE B 301 | 13.857 | 1.175 | 39.199 | 1.00 | 18.58 | C |
| ATOM | 5162 | CG1 | ILE B 301 | 12.519 | 0.475 | 38.861 | 1.00 | 19.45 | C |
| ATOM | 5165 | CD1 | ILE B 301 | 12.484 | -0.080 | 37.456 | 1.00 | 19.64 | C |
| ATOM | 5169 | CG2 | ILE B 301 | 14.899 | 0.096 | 39.512 | 1.00 | 18.33 | C |
| ATOM | 5173 | C | ILE B 301 | 15.017 | 2.579 | 41.002 | 1.00 | 17.95 | C |
| ATOM | 5174 | O | ILE B 301 | 15.361 | 2.151 | 42.109 | 1.00 | 17.99 | O |
| ATOM | 5175 | N | ALA B 302 | 15.740 | 3.461 | 40.304 | 1.00 | 16.92 | N |
| ATOM | 5177 | CA | ALA B 302 | 17.058 | 3.902 | 40.742 | 1.00 | 16.34 | C |
| ATOM | 5179 | CB | ALA B 302 | 17.698 | 4.738 | 39.702 | 1.00 | 16.84 | C |
| ATOM | 5183 | C | ALA B 302 | 17.019 | 4.654 | 42.052 | 1.00 | 16.05 | C |
| ATOM | 5184 | O | ALA B 302 | 17.828 | 4.414 | 42.935 | 1.00 | 15.80 | O |
| ATOM | 5185 | N | LEU B 303 | 16.068 | 5.556 | 42.183 | 1.00 | 17.14 | N |
| ATOM | 5187 | CA | LEU B 303 | 15.849 | 6.288 | 43.418 | 1.00 | 17.79 | C |
| ATOM | 5189 | CB | LEU B 303 | 14.791 | 7.385 | 43.231 | 1.00 | 18.09 | C |
| ATOM | 5192 | CG | LEU B 303 | 15.221 | 8.531 | 42.308 | 1.00 | 17.67 | C |
| ATOM | 5194 | CD1 | LEU B 303 | 14.092 | 9.512 | 42.250 | 1.00 | 19.09 | C |
| ATOM | 5198 | CD2 | LEU B 303 | 16.499 | 9.237 | 42.738 | 1.00 | 17.93 | C |
| ATOM | 5202 | C | LEU B 303 | 15.481 | 5.397 | 44.603 | 1.00 | 17.88 | C |
| ATOM | 5203 | O | LEU B 303 | 16.018 | 5.576 | 45.694 | 1.00 | 18.09 | O |
| ATOM | 5204 | N | LEU B 304 | 14.599 | 4.435 | 44.384 | 1.00 | 18.34 | N |
| ATOM | 5206 | CA | LEU B 304 | 14.225 | 3.462 | 45.424 | 1.00 | 19.12 | C |
| ATOM | 5208 | CB | LEU B 304 | 13.000 | 2.648 | 45.029 | 1.00 | 19.11 | C |
| ATOM | 5211 | CG | LEU B 304 | 11.682 | 3.361 | 45.284 | 1.00 | 22.25 | C |
| ATOM | 5213 | CD1 | LEU B 304 | 10.525 | 2.646 | 44.598 | 1.00 | 23.77 | C |
| ATOM | 5217 | CD2 | LEU B 304 | 11.401 | 3.446 | 46.774 | 1.00 | 24.94 | C |
| ATOM | 5221 | C | LEU B 304 | 15.362 | 2.504 | 45.797 | 1.00 | 19.16 | C |
| ATOM | 5222 | O | LEU B 304 | 15.543 | 2.207 | 46.962 | 1.00 | 18.26 | O |
| ATOM | 5223 | N | LYS B 305 | 16.118 | 2.041 | 44.817 | 1.00 | 19.66 | N |
| ATOM | 5225 | CA | LYS B 305 | 17.276 | 1.184 | 45.087 | 1.00 | 20.90 | C |
| ATOM | 5227 | CB | LYS B 305 | 18.086 | 0.982 | 43.803 | 1.00 | 21.43 | C |
| ATOM | 5230 | CG | LYS B 305 | 18.188 | -0.474 | 43.290 | 1.00 | 25.43 | C |
| ATOM | 5233 | CD | LYS B 305 | 19.671 | -0.824 | 43.050 | 1.00 | 29.56 | C |
| ATOM | 5236 | CE | LYS B 305 | 19.872 | -2.081 | 42.196 | 1.00 | 33.34 | C |
| ATOM | 5239 | NZ | LYS B 305 | 20.738 | -3.092 | 42.899 | 1.00 | 35.01 | N |
| ATOM | 5243 | C | LYS B 305 | 18.194 | 1.820 | 46.132 | 1.00 | 21.19 | C |
| ATOM | 5244 | O | LYS B 305 | 18.538 | 1.202 | 47.129 | 1.00 | 20.18 | O |
| ATOM | 5245 | N | ALA B 306 | 18.575 | 3.079 | 45.885 | 1.00 | 21.68 | N |
| ATOM | 5247 | CA | ALA B 306 | 19.510 | 3.801 | 46.737 | 1.00 | 21.68 | C |
| ATOM | 5249 | CB | ALA B 306 | 20.118 | 5.014 | 45.965 | 1.00 | 21.77 | C |
| ATOM | 5253 | C | ALA B 306 | 18.909 | 4.265 | 48.054 | 1.00 | 21.59 | C |
| ATOM | 5254 | O | ALA B 306 | 19.554 | 4.149 | 49.054 | 1.00 | 22.32 | O |
| ATOM | 5255 | N | SER B 307 | 17.673 | 4.763 | 48.059 | 1.00 | 21.99 | N |
| ATOM | 5257 | CA | SER B 307 | 17.102 | 5.400 | 49.238 | 1.00 | 22.32 | C |
| ATOM | 5259 | CB | SER B 307 | 16.153 | 6.529 | 48.826 | 1.00 | 22.68 | C |
| ATOM | 5262 | OG | SER B 307 | 14.966 | 6.025 | 48.261 | 1.00 | 27.06 | O |
| ATOM | 5264 | C | SER B 307 | 16.392 | 4.463 | 50.237 | 1.00 | 21.68 | C |
| ATOM | 5265 | O | SER B 307 | 16.207 | 4.829 | 51.383 | 1.00 | 21.09 | O |

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ATOM  5266 N   THR B 308    16.068  3.242 49.820 1.00 21.12      N
ATOM  5268 CA  THR B 308    15.358  2.303 50.663 1.00 20.17      C
ATOM  5270 CB  THR B 308    15.120  1.004 49.866 1.00 20.22      C
ATOM  5272 OG1 THR B 308    14.067  1.229 48.910 1.00 21.08      O
ATOM  5274 CG2 THR B 308    14.597 -0.110 50.733 1.00 20.01      C
ATOM  5278 C   THR B 308    16.055  2.063 52.013 1.00 19.87      C
ATOM  5279 O   THR B 308    15.457  2.269 53.050 1.00 19.84      O
ATOM  5280 N   ILE B 309    17.322  1.681 51.998 1.00 20.00      N
ATOM  5282 CA  ILE B 309    18.078  1.457 53.226 1.00 20.44      C
ATOM  5284 CB  ILE B 309    19.514  0.916 52.937 1.00 20.43      C
ATOM  5286 CG1 ILE B 309    20.193  0.428 54.226 1.00 21.85      C
ATOM  5289 CD1 ILE B 309    19.587 -0.887 54.827 1.00 23.34      C
ATOM  5293 CG2 ILE B 309    20.393  1.956 52.279 1.00 19.30      C
ATOM  5297 C   ILE B 309    18.118  2.715 54.081 1.00 20.93      C
ATOM  5298 O   ILE B 309    18.043  2.638 55.300 1.00 21.58      O
ATOM  5299 N   GLU B 310    18.183  3.877 53.450 1.00 21.10      N
ATOM  5301 CA  GLU B 310    18.233  5.136 54.194 1.00 20.55      C
ATOM  5303 CB  GLU B 310    18.665  6.279 53.278 1.00 21.11      C
ATOM  5306 CG  GLU B 310    20.079  6.040 52.736 1.00 21.63      C
ATOM  5309 CD  GLU B 310    20.596  7.171 51.871 1.00 21.01      C
ATOM  5310 OE1 GLU B 310    20.027  8.242 51.917 1.00 22.94      O
ATOM  5311 OE2 GLU B 310    21.586  6.987 51.151 1.00 24.16      O
ATOM  5312 C   GLU B 310    16.912  5.428 54.846 1.00 19.84      C
ATOM  5313 O   GLU B 310    16.861  5.928 55.933 1.00 18.83      O
ATOM  5314 N   ILE B 311    15.828  5.084 54.181 1.00 20.26      N
ATOM  5316 CA  ILE B 311    14.501  5.301 54.734 1.00 19.99      C
ATOM  5318 CB  ILE B 311    13.466  5.158 53.614 1.00 20.39      C
ATOM  5320 CG1 ILE B 311    13.622  6.325 52.637 1.00 20.26      C
ATOM  5323 CD1 ILE B 311    12.700  6.234 51.452 1.00 20.97      C
ATOM  5327 CG2 ILE B 311    12.013  5.097 54.200 1.00 20.99      C
ATOM  5331 C   ILE B 311    14.230  4.325 55.916 1.00 19.83      C
ATOM  5332 O   ILE B 311    13.590  4.684 56.920 1.00 18.39      O
ATOM  5333 N   MET B 312    14.774  3.111 55.796 1.00 19.60      N
ATOM  5335 CA  MET B 312    14.665  2.119 56.854 1.00 19.01      C
ATOM  5337 CB  MET B 312    15.236  0.768 56.399 1.00 19.11      C
ATOM  5340 CG  MET B 312    14.301  0.062 55.431 1.00 20.34      C
ATOM  5343 SD  MET B 312    15.032 -1.379 54.654 1.00 23.02      S
ATOM  5344 CE  MET B 312    15.212 -2.430 56.106 1.00 20.75      C
ATOM  5348 C   MET B 312    15.389  2.612 58.082 1.00 18.35      C
ATOM  5349 O   MET B 312    14.911  2.420 59.178 1.00 16.83      O
ATOM  5350 N   LEU B 313    16.551  3.235 57.888 1.00 18.33      N
ATOM  5352 CA  LEU B 313    17.357  3.744 58.995 1.00 18.26      C
ATOM  5354 CB  LEU B 313    18.725  4.206 58.489 1.00 18.25      C
ATOM  5357 CG  LEU B 313    19.673  3.040 58.189 1.00 18.56      C
ATOM  5359 CD1 LEU B 313    20.869  3.421 57.305 1.00 19.14      C
ATOM  5363 CD2 LEU B 313    20.170  2.424 59.473 1.00 18.97      C
ATOM  5367 C   LEU B 313    16.618  4.884 59.701 1.00 18.25      C
ATOM  5368 O   LEU B 313    16.587  4.957 60.918 1.00 18.53      O
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ATOM   5369  N   LEU B 314      15.981   5.746  58.938  1.00 18.14       N
ATOM   5371  CA  LEU B 314      15.184   6.842  59.509  1.00 18.65       C
ATOM   5373  CB  LEU B 314      14.670   7.733  58.372  1.00 19.14       C
ATOM   5376  CG  LEU B 314      15.050   9.202  58.059  1.00 20.71       C
ATOM   5378  CD1 LEU B 314      16.217   9.794  58.783  1.00 21.19       C
ATOM   5382  CD2 LEU B 314      15.206   9.415  56.548  1.00 19.63       C
ATOM   5386  C   LEU B 314      13.974   6.296  60.298  1.00 18.07       C
ATOM   5387  O   LEU B 314      13.629   6.774  61.370  1.00 17.93       O
ATOM   5388  N   GLU B 315      13.309   5.300  59.741  1.00 18.08       N
ATOM   5390  CA  GLU B 315      12.166   4.692  60.394  1.00 17.56       C
ATOM   5392  CB  GLU B 315      11.424   3.831  59.375  1.00 18.44       C
ATOM   5395  CG  GLU B 315      10.579   4.641  58.385  1.00 19.99       C
ATOM   5398  CD  GLU B 315       9.477   5.446  59.101  1.00 22.89       C
ATOM   5399  OE1 GLU B 315       8.566   4.831  59.704  1.00 24.43       O
ATOM   5400  OE2 GLU B 315       9.532   6.691  59.087  1.00 25.41       O
ATOM   5401  C   GLU B 315      12.581   3.895  61.644  1.00 16.81       C
ATOM   5402  O   GLU B 315      11.826   3.775  62.569  1.00 16.86       O
ATOM   5403  N   THR B 316      13.801   3.383  61.663  1.00 16.33       N
ATOM   5405  CA  THR B 316      14.366   2.674  62.780  1.00 16.08       C
ATOM   5407  CB  THR B 316      15.614   1.913  62.285  1.00 15.87       C
ATOM   5409  OG1 THR B 316      15.208   0.804  61.491  1.00 14.80       O
ATOM   5411  CG2 THR B 316      16.367   1.251  63.426  1.00 17.13       C
ATOM   5415  C   THR B 316      14.749   3.640  63.902  1.00 17.34       C
ATOM   5416  O   THR B 316      14.463   3.401  65.074  1.00 17.55       O
ATOM   5417  N   ALA B 317      15.400   4.745  63.552  1.00 18.26       N
ATOM   5419  CA  ALA B 317      15.695   5.811  64.522  1.00 18.61       C
ATOM   5421  CB  ALA B 317      16.429   6.964  63.824  1.00 18.53       C
ATOM   5425  C   ALA B 317      14.421   6.332  65.204  1.00 18.68       C
ATOM   5426  O   ALA B 317      14.389   6.571  66.400  1.00 18.89       O
ATOM   5427  N   ARG B 318      13.377   6.502  64.426  1.00 18.61       N
ATOM   5429  CA  ARG B 318      12.083   6.983  64.928  1.00 19.48       C
ATOM   5431  CB  ARG B 318      11.155   7.112  63.709  1.00 19.79       C
ATOM   5434  CG  ARG B 318       9.762   7.573  63.931  1.00 21.32       C
ATOM   5437  CD  ARG B 318       8.974   7.561  62.652  1.00 22.32       C
ATOM   5440  NE  ARG B 318       7.814   8.424  62.760  1.00 22.06       N
ATOM   5442  CZ  ARG B 318       7.149   8.902  61.720  1.00 23.25       C
ATOM   5443  NH1 ARG B 318       7.514   8.605  60.475  1.00 23.85       N
ATOM   5446  NH2 ARG B 318       6.114   9.702  61.930  1.00 23.62       N
ATOM   5449  C   ARG B 318      11.431   6.027  65.951  1.00 19.52       C
ATOM   5450  O   ARG B 318      10.512   6.419  66.646  1.00 18.83       O
ATOM   5451  N   ARG B 319      11.884   4.769  65.972  1.00 19.51       N
ATOM   5453  CA  ARG B 319      11.359   3.735  66.838  1.00 19.63       C
ATOM   5455  CB  ARG B 319      11.023   2.513  65.990  1.00 20.14       C
ATOM   5458  CG  ARG B 319       9.761   2.674  65.155  1.00 20.16       C
ATOM   5461  CD  ARG B 319       9.662   1.671  64.069  1.00 22.23       C
ATOM   5464  NE  ARG B 319       8.375   1.782  63.392  1.00 23.64       N
ATOM   5466  CZ  ARG B 319       8.091   2.668  62.463  1.00 22.31       C
ATOM   5467  NH1 ARG B 319       8.996   3.540  62.053  1.00 21.00       N
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| ATOM | 5470 | NH2 | ARG | B | 319 | 6.883 | 2.677 | 61.934 | 1.00 | 23.04 | N |
| ATOM | 5473 | C | ARG | B | 319 | 12.341 | 3.326 | 67.931 | 1.00 | 19.98 | C |
| ATOM | 5474 | O | ARG | B | 319 | 12.071 | 2.396 | 68.673 | 1.00 | 18.70 | O |
| ATOM | 5475 | N | TYR | B | 320 | 13.490 | 4.006 | 68.013 | 1.00 | 20.87 | N |
| ATOM | 5477 | CA | TYR | B | 320 | 14.429 | 3.830 | 69.124 | 1.00 | 21.31 | C |
| ATOM | 5479 | CB | TYR | B | 320 | 15.810 | 4.382 | 68.752 | 1.00 | 21.41 | C |
| ATOM | 5482 | CG | TYR | B | 320 | 16.807 | 4.495 | 69.897 | 1.00 | 21.78 | C |
| ATOM | 5483 | CD1 | TYR | B | 320 | 17.366 | 3.355 | 70.464 | 1.00 | 21.54 | C |
| ATOM | 5485 | CE1 | TYR | B | 320 | 18.290 | 3.432 | 71.508 | 1.00 | 21.17 | C |
| ATOM | 5487 | CZ | TYR | B | 320 | 18.689 | 4.668 | 71.998 | 1.00 | 21.48 | C |
| ATOM | 5488 | OH | TYR | B | 320 | 19.595 | 4.689 | 73.039 | 1.00 | 20.80 | O |
| ATOM | 5490 | CE2 | TYR | B | 320 | 18.163 | 5.837 | 71.448 | 1.00 | 21.45 | C |
| ATOM | 5492 | CD2 | TYR | B | 320 | 17.218 | 5.745 | 70.391 | 1.00 | 21.97 | C |
| ATOM | 5494 | C | TYR | B | 320 | 13.868 | 4.515 | 70.387 | 1.00 | 21.80 | C |
| ATOM | 5495 | O | TYR | B | 320 | 13.303 | 5.595 | 70.328 | 1.00 | 21.19 | O |
| ATOM | 5496 | N | ASN | B | 321 | 13.998 | 3.843 | 71.521 | 1.00 | 22.40 | N |
| ATOM | 5498 | CA | ASN | B | 321 | 13.573 | 4.373 | 72.802 | 1.00 | 22.77 | C |
| ATOM | 5500 | CB | ASN | B | 321 | 12.708 | 3.358 | 73.550 | 1.00 | 22.95 | C |
| ATOM | 5503 | CG | ASN | B | 321 | 12.145 | 3.903 | 74.842 | 1.00 | 22.61 | C |
| ATOM | 5504 | OD1 | ASN | B | 321 | 11.047 | 3.543 | 75.250 | 1.00 | 22.66 | O |
| ATOM | 5505 | ND2 | ASN | B | 321 | 12.895 | 4.762 | 75.498 | 1.00 | 23.35 | N |
| ATOM | 5508 | C | ASN | B | 321 | 14.835 | 4.609 | 73.562 | 1.00 | 23.23 | C |
| ATOM | 5509 | O | ASN | B | 321 | 15.522 | 3.651 | 73.936 | 1.00 | 22.65 | O |
| ATOM | 5510 | N | HIS | B | 322 | 15.151 | 5.884 | 73.795 | 1.00 | 24.18 | N |
| ATOM | 5512 | CA | HIS | B | 322 | 16.393 | 6.224 | 74.473 | 1.00 | 24.47 | C |
| ATOM | 5514 | CB | HIS | B | 322 | 16.671 | 7.716 | 74.398 | 1.00 | 24.86 | C |
| ATOM | 5517 | CG | HIS | B | 322 | 18.070 | 8.070 | 74.772 | 1.00 | 26.27 | C |
| ATOM | 5518 | ND1 | HIS | B | 322 | 19.137 | 7.229 | 74.524 | 1.00 | 28.18 | N |
| ATOM | 5520 | CE1 | HIS | B | 322 | 20.247 | 7.791 | 74.968 | 1.00 | 29.87 | C |
| ATOM | 5522 | NE2 | HIS | B | 322 | 19.940 | 8.968 | 75.492 | 1.00 | 29.50 | N |
| ATOM | 5524 | CD2 | HIS | B | 322 | 18.582 | 9.162 | 75.388 | 1.00 | 28.26 | C |
| ATOM | 5526 | C | HIS | B | 322 | 16.424 | 5.764 | 75.919 | 1.00 | 24.60 | C |
| ATOM | 5527 | O | HIS | B | 322 | 17.498 | 5.505 | 76.451 | 1.00 | 24.45 | O |
| ATOM | 5528 | N | GLU | B | 323 | 15.263 | 5.659 | 76.555 | 1.00 | 25.02 | N |
| ATOM | 5530 | CA | GLU | B | 323 | 15.203 | 5.201 | 77.954 | 1.00 | 26.23 | C |
| ATOM | 5532 | CB | GLU | B | 323 | 13.811 | 5.403 | 78.571 | 1.00 | 26.65 | C |
| ATOM | 5535 | CG | GLU | B | 323 | 13.212 | 6.790 | 78.408 | 1.00 | 28.87 | C |
| ATOM | 5538 | CD | GLU | B | 323 | 11.754 | 6.805 | 78.818 | 1.00 | 31.76 | C |
| ATOM | 5539 | OE1 | GLU | B | 323 | 10.910 | 6.371 | 77.989 | 1.00 | 33.58 | O |
| ATOM | 5540 | OE2 | GLU | B | 323 | 11.461 | 7.229 | 79.964 | 1.00 | 32.60 | O |
| ATOM | 5541 | C | GLU | B | 323 | 15.596 | 3.725 | 78.122 | 1.00 | 25.81 | C |
| ATOM | 5542 | O | GLU | B | 323 | 16.390 | 3.390 | 79.010 | 1.00 | 26.29 | O |
| ATOM | 5543 | N | THR | B | 324 | 15.012 | 2.852 | 77.298 | 1.00 | 24.93 | N |
| ATOM | 5545 | CA | THR | B | 324 | 15.311 | 1.418 | 77.351 | 1.00 | 24.29 | C |
| ATOM | 5547 | CB | THR | B | 324 | 14.126 | 0.596 | 76.828 | 1.00 | 24.13 | C |
| ATOM | 5549 | OG1 | THR | B | 324 | 13.771 | 1.042 | 75.512 | 1.00 | 25.21 | O |
| ATOM | 5551 | CG2 | THR | B | 324 | 12.851 | 0.815 | 77.667 | 1.00 | 23.59 | C |
| ATOM | 5555 | C | THR | B | 324 | 16.557 | 1.042 | 76.551 | 1.00 | 24.20 | C |

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ATOM   5556 O   THR B 324    17.089 -0.046 76.731 1.00 23.81      O
ATOM   5557 N   GLU B 325    17.028  1.944 75.684 1.00 24.04      N
ATOM   5559 CA  GLU B 325    17.977  1.596 74.625 1.00 23.70      C
ATOM   5561 CB  GLU B 325    19.364  1.253 75.189 1.00 24.14      C
ATOM   5564 CG  GLU B 325    19.832  2.161 76.308 1.00 26.62      C
ATOM   5567 CD  GLU B 325    21.336  2.127 76.505 1.00 29.49      C
ATOM   5568 OE1 GLU B 325    21.818  1.245 77.250 1.00 32.94      O
ATOM   5569 OE2 GLU B 325    22.039  2.989 75.926 1.00 32.53      O
ATOM   5570 C   GLU B 325    17.472  0.421 73.791 1.00 22.50      C
ATOM   5571 O   GLU B 325    18.257 -0.448 73.445 1.00 22.33      O
ATOM   5572 N   CYS B 326    16.175  0.415 73.471 1.00 21.62      N
ATOM   5574 CA  CYS B 326    15.556 -0.628 72.625 1.00 21.10      C
ATOM   5576 CB  CYS B 326    14.577 -1.483 73.437 1.00 20.94      C
ATOM   5579 SG  CYS B 326    15.362 -2.639 74.570 1.00 19.56      S
ATOM   5580 C   CYS B 326    14.796 -0.052 71.432 1.00 20.61      C
ATOM   5581 O   CYS B 326    14.300  1.071 71.509 1.00 20.40      O
ATOM   5582 N   ILE B 327    14.697 -0.836 70.348 1.00 19.85      N
ATOM   5584 CA  ILE B 327    13.946 -0.442 69.150 1.00 19.33      C
ATOM   5586 CB  ILE B 327    14.789 -0.602 67.845 1.00 19.03      C
ATOM   5588 CG1 ILE B 327    16.075  0.213 67.923 1.00 19.00      C
ATOM   5591 CD1 ILE B 327    17.036 -0.001 66.787 1.00 19.79      C
ATOM   5595 CG2 ILE B 327    13.998 -0.115 66.652 1.00 19.82      C
ATOM   5599 C   ILE B 327    12.702 -1.301 69.059 1.00 19.16      C
ATOM   5600 O   ILE B 327    12.772 -2.506 69.306 1.00 19.67      O
ATOM   5601 N   THR B 328    11.581 -0.682 68.682 1.00 18.82      N
ATOM   5603 CA  THR B 328    10.294 -1.352 68.524 1.00 18.96      C
ATOM   5605 CB  THR B 328     9.249 -0.689 69.425 1.00 18.83      C
ATOM   5607 OG1 THR B 328     9.679 -0.792 70.786 1.00 18.81      O
ATOM   5609 CG2 THR B 328     7.904 -1.434 69.391 1.00 18.66      C
ATOM   5613 C   THR B 328     9.788 -1.324 67.058 1.00 19.53      C
ATOM   5614 O   THR B 328     9.301 -0.299 66.575 1.00 19.81      O
ATOM   5615 N   PHE B 329     9.864 -2.476 66.390 1.00 19.15      N
ATOM   5617 CA  PHE B 329     9.343 -2.642 65.054 1.00 19.04      C
ATOM   5619 CB  PHE B 329    10.245 -3.635 64.309 1.00 19.24      C
ATOM   5622 CG  PHE B 329    11.622 -3.116 64.046 1.00 17.86      C
ATOM   5623 CD1 PHE B 329    12.727 -3.768 64.539 1.00 17.81      C
ATOM   5625 CE1 PHE B 329    14.020 -3.267 64.293 1.00 19.08      C
ATOM   5627 CZ  PHE B 329    14.187 -2.105 63.530 1.00 18.44      C
ATOM   5629 CE2 PHE B 329    13.084 -1.435 63.061 1.00 18.69      C
ATOM   5631 CD2 PHE B 329    11.808 -1.933 63.326 1.00 19.29      C
ATOM   5633 C   PHE B 329     7.896 -3.128 65.037 1.00 19.53      C
ATOM   5634 O   PHE B 329     7.393 -3.654 66.012 1.00 19.84      O
ATOM   5635 N   LEU B 330     7.235 -2.944 63.899 1.00 20.05      N
ATOM   5637 CA  LEU B 330     5.863 -3.396 63.695 1.00 20.57      C
ATOM   5639 CB  LEU B 330     5.783 -4.927 63.618 1.00 20.30      C
ATOM   5642 CG  LEU B 330     6.728 -5.566 62.591 1.00 20.35      C
ATOM   5644 CD1 LEU B 330     6.402 -7.034 62.356 1.00 22.00      C
ATOM   5648 CD2 LEU B 330     6.785 -4.780 61.247 1.00 21.40      C
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ATOM  5652  C   LEU B 330   4.976  -2.784  64.763  1.00 21.47      C
ATOM  5653  O   LEU B 330   4.895  -1.556  64.830  1.00 21.99      O
ATOM  5654  N   LYS B 331   4.326  -3.599  65.588  1.00 21.65      N
ATOM  5656  CA  LYS B 331   3.487  -3.085  66.647  1.00 22.41      C
ATOM  5658  CB  LYS B 331   2.128  -3.796  66.636  1.00 23.11      C
ATOM  5661  CG  LYS B 331   1.145  -3.253  67.690  1.00 24.32      C
ATOM  5664  CD  LYS B 331  -0.236  -3.877  67.543  1.00 27.35      C
ATOM  5667  CE  LYS B 331  -0.555  -4.869  68.655  1.00 27.05      C
ATOM  5670  NZ  LYS B 331  -2.010  -4.872  68.941  1.00 28.91      N
ATOM  5674  C   LYS B 331   4.126  -3.198  68.045  1.00 22.31      C
ATOM  5675  O   LYS B 331   4.046  -2.242  68.794  1.00 22.32      O
ATOM  5676  N   ASP B 332   4.759  -4.342  68.351  1.00 21.99      N
ATOM  5678  CA  ASP B 332   5.142  -4.776  69.707  1.00 22.70      C
ATOM  5680  CB  ASP B 332   4.166  -5.881  70.209  1.00 23.29      C
ATOM  5683  CG  ASP B 332   2.813  -5.372  70.469  1.00 26.06      C
ATOM  5684  OD1 ASP B 332   2.666  -4.139  70.484  1.00 31.51      O
ATOM  5685  OD2 ASP B 332   1.838  -6.112  70.700  1.00 31.02      O
ATOM  5686  C   ASP B 332   6.488  -5.470  69.789  1.00 21.82      C
ATOM  5687  O   ASP B 332   6.823  -6.033  70.836  1.00 22.97      O
ATOM  5688  N   PHE B 333   7.205  -5.541  68.692  1.00 20.93      N
ATOM  5690  CA  PHE B 333   8.393  -6.381  68.615  1.00 20.56      C
ATOM  5692  CB  PHE B 333   8.589  -6.931  67.175  1.00 20.26      C
ATOM  5695  CG  PHE B 333   7.773  -8.187  66.859  1.00 18.60      C
ATOM  5696  CD1 PHE B 333   7.974  -8.869  65.668  1.00 16.45      C
ATOM  5698  CE1 PHE B 333   7.235 -10.046  65.359  1.00 16.99      C
ATOM  5700  CZ  PHE B 333   6.284 -10.521  66.247  1.00 16.55      C
ATOM  5702  CE2 PHE B 333   6.074  -9.858  67.452  1.00 17.17      C
ATOM  5704  CD2 PHE B 333   6.818  -8.686  67.751  1.00 18.38      C
ATOM  5706  C   PHE B 333   9.528  -5.473  69.008  1.00 20.49      C
ATOM  5707  O   PHE B 333   9.864  -4.548  68.262  1.00 20.91      O
ATOM  5708  N   THR B 334  10.100  -5.703  70.180  1.00 20.24      N
ATOM  5710  CA  THR B 334  11.125  -4.806  70.703  1.00 20.44      C
ATOM  5712  CB  THR B 334  10.594  -3.926  71.894  1.00 20.17      C
ATOM  5714  OG1 THR B 334  11.636  -3.678  72.846  1.00 20.79      O
ATOM  5716  CG2 THR B 334   9.522  -4.614  72.673  1.00 21.30      C
ATOM  5720  C   THR B 334  12.439  -5.534  71.012  1.00 20.30      C
ATOM  5721  O   THR B 334  12.449  -6.640  71.561  1.00 19.10      O
ATOM  5722  N   TYR B 335  13.534  -4.867  70.631  1.00 20.31      N
ATOM  5724  CA  TYR B 335  14.844  -5.473  70.484  1.00 20.40      C
ATOM  5726  CB  TYR B 335  15.174  -5.647  68.990  1.00 20.45      C
ATOM  5729  CG  TYR B 335  14.148  -6.448  68.225  1.00 20.55      C
ATOM  5730  CD1 TYR B 335  13.154  -5.818  67.476  1.00 20.44      C
ATOM  5732  CE1 TYR B 335  12.198  -6.569  66.797  1.00 19.73      C
ATOM  5734  CZ  TYR B 335  12.257  -7.953  66.864  1.00 19.12      C
ATOM  5735  OH  TYR B 335  11.337  -8.725  66.209  1.00 17.64      O
ATOM  5737  CE2 TYR B 335  13.229  -8.579  67.601  1.00 19.14      C
ATOM  5739  CD2 TYR B 335  14.159  -7.836  68.272  1.00 19.10      C
ATOM  5741  C   TYR B 335  15.932  -4.612  71.129  1.00 20.52      C
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ATOM  5742  O   TYR B 335    16.014  -3.412 70.893 1.00 20.05      O
ATOM  5743  N   SER B 336    16.782  -5.251 71.922 1.00 20.43      N
ATOM  5745  CA  SER B 336    17.952  -4.597 72.486 1.00 20.33      C
ATOM  5747  CB  SER B 336    18.305  -5.241 73.831 1.00 19.99      C
ATOM  5750  OG  SER B 336    18.585  -6.618 73.665 1.00 20.30      O
ATOM  5752  C   SER B 336    19.143  -4.690 71.528 1.00 20.27      C
ATOM  5753  O   SER B 336    19.108  -5.427 70.523 1.00 19.81      O
ATOM  5754  N   LYS B 337    20.185  -3.919 71.834 1.00 20.18      N
ATOM  5756  CA  LYS B 337    21.451  -4.021 71.121 1.00 20.61      C
ATOM  5758  CB  LYS B 337    22.568  -3.298 71.884 1.00 20.73      C
ATOM  5761  CG  LYS B 337    22.946  -1.926 71.372 1.00 20.74      C
ATOM  5764  CD  LYS B 337    24.458  -1.797 71.188 1.00 22.51      C
ATOM  5767  CE  LYS B 337    24.986  -0.449 71.664 1.00 24.73      C
ATOM  5770  NZ  LYS B 337    25.604   0.333 70.567 1.00 26.13      N
ATOM  5774  C   LYS B 337    21.835  -5.494 70.951 1.00 20.77      C
ATOM  5775  O   LYS B 337    22.051  -5.968 69.837 1.00 20.79      O
ATOM  5776  N   ASP B 338    21.905  -6.215 72.065 1.00 20.59      N
ATOM  5778  CA  ASP B 338    22.367  -7.594 72.041 1.00 20.75      C
ATOM  5780  CB  ASP B 338    22.527  -8.136 73.470 1.00 20.88      C
ATOM  5783  CG  ASP B 338    23.646  -7.453 74.224 1.00 21.14      C
ATOM  5784  OD1 ASP B 338    24.481  -6.772 73.571 1.00 23.64      O
ATOM  5785  OD2 ASP B 338    23.767  -7.516 75.454 1.00 19.13      O
ATOM  5786  C   ASP B 338    21.493  -8.527 71.193 1.00 20.83      C
ATOM  5787  O   ASP B 338    21.981  -9.566 70.726 1.00 20.93      O
ATOM  5788  N   ASP B 339    20.221  -8.180 70.990 1.00 20.59      N
ATOM  5790  CA  ASP B 339    19.355  -8.971 70.098 1.00 20.18      C
ATOM  5792  CB  ASP B 339    17.901  -8.484 70.139 1.00 20.18      C
ATOM  5795  CG  ASP B 339    17.172  -8.945 71.373 1.00 20.04      C
ATOM  5796  OD1 ASP B 339    17.694  -9.807 72.080 1.00 21.91      O
ATOM  5797  OD2 ASP B 339    16.061  -8.521 71.725 1.00 22.48      O
ATOM  5798  C   ASP B 339    19.864  -8.993 68.658 1.00 20.01      C
ATOM  5799  O   ASP B 339    19.809 -10.031 67.992 1.00 19.12      O
ATOM  5800  N   PHE B 340    20.347  -7.845 68.185 1.00 20.00      N
ATOM  5802  CA  PHE B 340    20.913  -7.732 66.842 1.00 20.04      C
ATOM  5804  CB  PHE B 340    21.054  -6.266 66.464 1.00 19.91      C
ATOM  5807  CG  PHE B 340    19.739  -5.540 66.446 1.00 18.63      C
ATOM  5808  CD1 PHE B 340    19.324  -4.812 67.547 1.00 15.10      C
ATOM  5810  CE1 PHE B 340    18.111  -4.167 67.544 1.00 15.79      C
ATOM  5812  CZ  PHE B 340    17.279  -4.273 66.438 1.00 16.79      C
ATOM  5814  CE2 PHE B 340    17.687  -5.004 65.329 1.00 16.17      C
ATOM  5816  CD2 PHE B 340    18.896  -5.640 65.341 1.00 17.09      C
ATOM  5818  C   PHE B 340    22.248  -8.474 66.748 1.00 20.74      C
ATOM  5819  O   PHE B 340    22.536  -9.163 65.759 1.00 20.52      O
ATOM  5820  N   HIS B 341    23.035  -8.357 67.814 1.00 20.93      N
ATOM  5822  CA  HIS B 341    24.290  -9.068 67.939 1.00 21.23      C
ATOM  5824  CB  HIS B 341    24.945  -8.689 69.274 1.00 21.87      C
ATOM  5827  CG  HIS B 341    26.425  -8.874 69.296 1.00 24.32      C
ATOM  5828  ND1 HIS B 341    27.258  -8.283 68.370 1.00 27.26      N
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ATOM  5830 CE1 HIS B 341    28.511  -8.619 68.637 1.00 29.23        C
ATOM  5832 NE2 HIS B 341    28.520  -9.394 69.712 1.00 28.26        N
ATOM  5834 CD2 HIS B 341    27.227  -9.569 70.143 1.00 26.81        C
ATOM  5836 C   HIS B 341    24.062 -10.587 67.867 1.00 20.61        C
ATOM  5837 O   HIS B 341    24.885 -11.326 67.338 1.00 19.93        O
ATOM  5838 N   ARG B 342    22.923 -11.031 68.383 1.00 20.24        N
ATOM  5840 CA  ARG B 342    22.622 -12.446 68.492 1.00 20.26        C
ATOM  5842 CB  ARG B 342    21.609 -12.680 69.603 1.00 20.30        C
ATOM  5845 CG  ARG B 342    22.281 -12.799 70.960 1.00 21.07        C
ATOM  5848 CD  ARG B 342    21.338 -13.108 72.105 1.00 22.73        C
ATOM  5851 NE  ARG B 342    21.925 -12.713 73.387 1.00 24.61        N
ATOM  5853 CZ  ARG B 342    21.680 -11.569 74.039 1.00 26.32        C
ATOM  5854 NH1 ARG B 342    20.828 -10.661 73.557 1.00 25.57        N
ATOM  5857 NH2 ARG B 342    22.292 -11.339 75.204 1.00 26.91        N
ATOM  5860 C   ARG B 342    22.147 -13.060 67.175 1.00 20.12        C
ATOM  5861 O   ARG B 342    22.203 -14.279 67.005 1.00 20.38        O
ATOM  5862 N   ALA B 343    21.714 -12.209 66.253 1.00 20.25        N
ATOM  5864 CA  ALA B 343    21.349 -12.602 64.899 1.00 20.52        C
ATOM  5866 CB  ALA B 343    20.282 -11.648 64.333 1.00 20.71        C
ATOM  5870 C   ALA B 343    22.542 -12.636 63.954 1.00 20.56        C
ATOM  5871 O   ALA B 343    22.363 -12.934 62.781 1.00 20.80        O
ATOM  5872 N   GLY B 344    23.736 -12.303 64.448 1.00 20.56        N
ATOM  5874 CA  GLY B 344    24.962 -12.437 63.681 1.00 20.76        C
ATOM  5877 C   GLY B 344    25.405 -11.172 62.972 1.00 21.42        C
ATOM  5878 O   GLY B 344    26.286 -11.206 62.121 1.00 20.93        O
ATOM  5879 N   LEU B 345    24.792 -10.046 63.313 1.00 22.33        N
ATOM  5881 CA  LEU B 345    25.185  -8.778 62.709 1.00 23.03        C
ATOM  5883 CB  LEU B 345    24.068  -7.734 62.844 1.00 23.04        C
ATOM  5886 CG  LEU B 345    22.727  -8.159 62.246 1.00 22.68        C
ATOM  5888 CD1 LEU B 345    21.729  -7.055 62.440 1.00 23.50        C
ATOM  5892 CD2 LEU B 345    22.859  -8.503 60.764 1.00 22.37        C
ATOM  5896 C   LEU B 345    26.477  -8.309 63.369 1.00 23.48        C
ATOM  5897 O   LEU B 345    26.695  -8.537 64.568 1.00 23.52        O
ATOM  5898 N   GLN B 346    27.351  -7.700 62.570 1.00 23.84        N
ATOM  5900 CA  GLN B 346    28.660  -7.277 63.066 1.00 24.25        C
ATOM  5902 CB  GLN B 346    29.712  -7.209 61.935 1.00 24.57        C
ATOM  5905 CG  GLN B 346    29.375  -6.362 60.715 1.00 25.35        C
ATOM  5908 CD  GLN B 346    30.330  -6.587 59.535 1.00 26.53        C
ATOM  5909 OE1 GLN B 346    30.205  -5.934 58.498 1.00 31.38        O
ATOM  5910 NE2 GLN B 346    31.263  -7.489 59.690 1.00 24.82        N
ATOM  5913 C   GLN B 346    28.566  -5.958 63.843 1.00 24.06        C
ATOM  5914 O   GLN B 346    27.653  -5.181 63.619 1.00 22.61        O
ATOM  5915 N   VAL B 347    29.509  -5.752 64.774 1.00 24.61        N
ATOM  5917 CA  VAL B 347    29.551  -4.553 65.631 1.00 24.76        C
ATOM  5919 CB  VAL B 347    30.753  -4.562 66.633 1.00 24.64        C
ATOM  5921 CG1 VAL B 347    30.433  -3.707 67.857 1.00 24.46        C
ATOM  5925 CG2 VAL B 347    31.109  -5.959 67.066 1.00 25.76        C
ATOM  5929 C   VAL B 347    29.670  -3.285 64.787 1.00 24.58        C
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ATOM  5930 O   VAL B 347    29.117 -2.264 65.128 1.00 24.21    O
ATOM  5931 N   GLU B 348    30.403 -3.373 63.688 1.00 25.11    N
ATOM  5933 CA  GLU B 348    30.570 -2.253 62.769 1.00 26.25    C
ATOM  5935 CB  GLU B 348    31.514 -2.630 61.611 1.00 26.63    C
ATOM  5938 CG  GLU B 348    32.980 -2.792 62.024 1.00 28.25    C
ATOM  5941 CD  GLU B 348    33.376 -4.218 62.372 1.00 30.73    C
ATOM  5942 OE1 GLU B 348    32.478 -5.084 62.504 1.00 32.74    O
ATOM  5943 OE2 GLU B 348    34.595 -4.475 62.528 1.00 31.99    O
ATOM  5944 C   GLU B 348    29.241 -1.768 62.205 1.00 26.52    C
ATOM  5945 O   GLU B 348    29.132 -0.605 61.856 1.00 27.24    O
ATOM  5946 N   PHE B 349    28.261 -2.668 62.091 1.00 26.35    N
ATOM  5948 CA  PHE B 349    26.902 -2.359 61.625 1.00 26.53    C
ATOM  5950 CB  PHE B 349    26.283 -3.652 61.030 1.00 27.07    C
ATOM  5953 CG  PHE B 349    24.955 -3.474 60.284 1.00 27.97    C
ATOM  5954 CD1 PHE B 349    24.801 -2.526 59.295 1.00 29.03    C
ATOM  5956 CE1 PHE B 349    23.593 -2.410 58.587 1.00 29.29    C
ATOM  5958 CZ  PHE B 349    22.534 -3.269 58.866 1.00 29.80    C
ATOM  5960 CE2 PHE B 349    22.668 -4.231 59.842 1.00 28.08    C
ATOM  5962 CD2 PHE B 349    23.882 -4.345 60.537 1.00 29.40    C
ATOM  5964 C   PHE B 349    26.040 -1.845 62.782 1.00 26.01    C
ATOM  5965 O   PHE B 349    25.374 -0.808 62.667 1.00 27.32    O
ATOM  5966 N   ILE B 350    26.048 -2.565 63.895 1.00 25.04    N
ATOM  5968 CA  ILE B 350    25.114 -2.299 64.977 1.00 24.46    C
ATOM  5970 CB  ILE B 350    25.220 -3.375 66.089 1.00 24.65    C
ATOM  5972 CG1 ILE B 350    24.795 -4.753 65.561 1.00 25.40    C
ATOM  5975 CD1 ILE B 350    25.391 -5.915 66.342 1.00 24.28    C
ATOM  5979 CG2 ILE B 350    24.372 -2.977 67.316 1.00 23.35    C
ATOM  5983 C   ILE B 350    25.370 -0.937 65.588 1.00 23.74    C
ATOM  5984 O   ILE B 350    24.456 -0.138 65.735 1.00 24.06    O
ATOM  5985 N   ASN B 351    26.615 -0.690 65.959 1.00 23.14    N
ATOM  5987 CA  ASN B 351    26.951  0.465 66.797 1.00 23.18    C
ATOM  5989 CB  ASN B 351    28.417  0.385 67.280 1.00 23.11    C
ATOM  5992 CG  ASN B 351    28.580 -0.413 68.591 1.00 24.24    C
ATOM  5993 OD1 ASN B 351    27.634 -1.013 69.119 1.00 24.68    O
ATOM  5994 ND2 ASN B 351    29.792 -0.408 69.119 1.00 25.12    N
ATOM  5997 C   ASN B 351    26.621  1.827 66.144 1.00 22.25    C
ATOM  5998 O   ASN B 351    25.978  2.661 66.758 1.00 21.44    O
ATOM  5999 N   PRO B 352    27.011  2.040 64.898 1.00 22.06    N
ATOM  6000 CA  PRO B 352    26.659  3.279 64.196 1.00 21.97    C
ATOM  6002 CB  PRO B 352    27.300  3.087 62.825 1.00 22.02    C
ATOM  6005 CG  PRO B 352    28.358  2.100 63.028 1.00 21.94    C
ATOM  6008 CD  PRO B 352    27.840  1.161 64.060 1.00 22.45    C
ATOM  6011 C   PRO B 352    25.151  3.501 64.048 1.00 22.15    C
ATOM  6012 O   PRO B 352    24.700  4.640 64.067 1.00 22.27    O
ATOM  6013 N   ILE B 353    24.383  2.430 63.897 1.00 22.16    N
ATOM  6015 CA  ILE B 353    22.944  2.571 63.753 1.00 22.41    C
ATOM  6017 CB  ILE B 353    22.320  1.236 63.269 1.00 22.68    C
ATOM  6019 CG1 ILE B 353    22.760  0.968 61.826 1.00 23.88    C
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ATOM  6022 CD1 ILE B 353    22.267 -0.333 61.234 1.00 24.70      C
ATOM  6026 CG2 ILE B 353    20.799  1.281 63.344 1.00 23.27      C
ATOM  6030 C   ILE B 353    22.330  3.069 65.062 1.00 22.45      C
ATOM  6031 O   ILE B 353    21.366  3.850 65.047 1.00 21.42      O
ATOM  6032 N   PHE B 354    22.897  2.627 66.187 1.00 22.75      N
ATOM  6034 CA  PHE B 354    22.419  3.060 67.503 1.00 23.03      C
ATOM  6036 CB  PHE B 354    22.822  2.069 68.618 1.00 23.54      C
ATOM  6039 CG  PHE B 354    21.777  0.993 68.874 1.00 23.55      C
ATOM  6040 CD1 PHE B 354    21.786 -0.189 68.142 1.00 22.65      C
ATOM  6042 CE1 PHE B 354    20.841 -1.166 68.358 1.00 22.86      C
ATOM  6044 CZ  PHE B 354    19.861 -0.976 69.308 1.00 24.11      C
ATOM  6046 CE2 PHE B 354    19.837  0.206 70.052 1.00 24.26      C
ATOM  6048 CD2 PHE B 354    20.793  1.177 69.830 1.00 23.71      C
ATOM  6050 C   PHE B 354    22.879  4.475 67.824 1.00 22.76      C
ATOM  6051 O   PHE B 354    22.102  5.260 68.340 1.00 23.11      O
ATOM  6052 N   GLU B 355    24.121  4.809 67.500 1.00 22.50      N
ATOM  6054 CA  GLU B 355    24.564  6.197 67.547 1.00 22.65      C
ATOM  6056 CB  GLU B 355    25.988  6.344 66.980 1.00 23.46      C
ATOM  6059 CG  GLU B 355    27.097  6.173 68.008 1.00 25.71      C
ATOM  6062 CD  GLU B 355    28.432  5.742 67.416 1.00 29.42      C
ATOM  6063 OE1 GLU B 355    29.424  5.673 68.197 1.00 32.31      O
ATOM  6064 OE2 GLU B 355    28.501  5.470 66.185 1.00 31.81      O
ATOM  6065 C   GLU B 355    23.621  7.115 66.761 1.00 22.10      C
ATOM  6066 O   GLU B 355    23.160  8.122 67.282 1.00 22.03      O
ATOM  6067 N   PHE B 356    23.341  6.767 65.506 1.00 21.38      N
ATOM  6069 CA  PHE B 356    22.485  7.588 64.668 1.00 21.28      C
ATOM  6071 CB  PHE B 356    22.400  6.997 63.248 1.00 21.46      C
ATOM  6074 CG  PHE B 356    21.411  7.703 62.349 1.00 19.88      C
ATOM  6075 CD1 PHE B 356    21.728  8.922 61.765 1.00 20.32      C
ATOM  6077 CE1 PHE B 356    20.799  9.572 60.929 1.00 19.72      C
ATOM  6079 CZ  PHE B 356    19.551  8.977 60.686 1.00 19.12      C
ATOM  6081 CE2 PHE B 356    19.240  7.769 61.280 1.00 19.42      C
ATOM  6083 CD2 PHE B 356    20.165  7.140 62.093 1.00 18.90      C
ATOM  6085 C   PHE B 356    21.083  7.753 65.278 1.00 21.70      C
ATOM  6086 O   PHE B 356    20.522  8.848 65.286 1.00 21.32      O
ATOM  6087 N   SER B 357    20.537  6.665 65.818 1.00 22.22      N
ATOM  6089 CA  SER B 357    19.198  6.693 66.379 1.00 22.34      C
ATOM  6091 CB  SER B 357    18.761  5.297 66.834 1.00 22.15      C
ATOM  6094 OG  SER B 357    18.850  4.381 65.770 1.00 20.39      O
ATOM  6096 C   SER B 357    19.121  7.674 67.545 1.00 23.09      C
ATOM  6097 O   SER B 357    18.152  8.427 67.651 1.00 22.79      O
ATOM  6098 N   ARG B 358    20.133  7.681 68.418 1.00 23.94      N
ATOM  6100 CA  ARG B 358    20.055  8.569 69.578 1.00 25.01      C
ATOM  6102 CB  ARG B 358    20.892  8.095 70.784 1.00 25.27      C
ATOM  6105 CG  ARG B 358    22.385  8.167 70.684 1.00 27.29      C
ATOM  6108 CD  ARG B 358    23.090  7.636 71.963 1.00 29.36      C
ATOM  6111 NE  ARG B 358    23.411  6.218 71.837 1.00 31.12      N
ATOM  6113 CZ  ARG B 358    24.583  5.717 71.431 1.00 32.37      C
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ATOM  6114 NH1 ARG B 358    25.612  6.508 71.116 1.00 32.15        N
ATOM  6117 NH2 ARG B 358    24.727  4.395 71.336 1.00 32.81        N
ATOM  6120 C   ARG B 358    20.314 10.010 69.171 1.00 24.86        C
ATOM  6121 O   ARG B 358    19.812 10.920 69.815 1.00 24.77        O
ATOM  6122 N   ALA B 359    21.028 10.213 68.064 1.00 25.00        N
ATOM  6124 CA  ALA B 359    21.193 11.559 67.510 1.00 25.04        C
ATOM  6126 CB  ALA B 359    22.292 11.581 66.462 1.00 25.27        C
ATOM  6130 C   ALA B 359    19.866 12.069 66.946 1.00 25.27        C
ATOM  6131 O   ALA B 359    19.472 13.211 67.213 1.00 24.83        O
ATOM  6132 N   MET B 360    19.163 11.205 66.208 1.00 25.58        N
ATOM  6134 CA  MET B 360    17.848 11.524 65.692 1.00 26.02        C
ATOM  6136 CB  MET B 360    17.311 10.355 64.891 1.00 26.75        C
ATOM  6139 CG  MET B 360    17.865 10.264 63.462 1.00 26.69        C
ATOM  6142 SD  MET B 360    17.600 11.773 62.530 1.00 26.78        S
ATOM  6143 CE  MET B 360    15.878 11.818 62.334 1.00 29.20        C
ATOM  6147 C   MET B 360    16.870 11.875 66.805 1.00 27.02        C
ATOM  6148 O   MET B 360    16.050 12.758 66.648 1.00 27.29        O
ATOM  6149 N   ARG B 361    16.975 11.221 67.950 1.00 28.14        N
ATOM  6151 CA  ARG B 361    16.062 11.498 69.052 1.00 29.35        C
ATOM  6153 CB  ARG B 361    16.202 10.452 70.169 1.00 29.79        C
ATOM  6156 CG  ARG B 361    14.909 10.252 70.977 1.00 32.56        C
ATOM  6159 CD  ARG B 361    14.982 10.424 72.510 1.00 33.68        C
ATOM  6162 NE  ARG B 361    15.990 11.386 72.937 1.00 36.77        N
ATOM  6164 CZ  ARG B 361    16.081 11.895 74.152 1.00 39.67        C
ATOM  6165 NH1 ARG B 361    15.210 11.563 75.105 1.00 41.48        N
ATOM  6168 NH2 ARG B 361    17.049 12.766 74.417 1.00 42.15        N
ATOM  6171 C   ARG B 361    16.246 12.903 69.621 1.00 29.48        C
ATOM  6172 O   ARG B 361    15.260 13.539 69.984 1.00 29.69        O
ATOM  6173 N   ARG B 362    17.489 13.394 69.692 1.00 29.21        N
ATOM  6175 CA  ARG B 362    17.754 14.740 70.221 1.00 29.26        C
ATOM  6177 CB  ARG B 362    19.255 15.033 70.233 1.00 29.68        C
ATOM  6180 CG  ARG B 362    20.021 14.231 71.246 1.00 31.69        C
ATOM  6183 CD  ARG B 362    21.494 14.550 71.257 1.00 34.31        C
ATOM  6186 NE  ARG B 362    22.297 13.329 71.265 1.00 37.98        N
ATOM  6188 CZ  ARG B 362    23.121 12.930 70.302 1.00 39.97        C
ATOM  6189 NH1 ARG B 362    23.289 13.642 69.186 1.00 41.73        N
ATOM  6192 NH2 ARG B 362    23.790 11.795 70.459 1.00 40.75        N
ATOM  6195 C   ARG B 362    17.060 15.871 69.446 1.00 28.31        C
ATOM  6196 O   ARG B 362    16.831 16.967 69.983 1.00 28.38        O
ATOM  6197 N   LEU B 363    16.780 15.615 68.178 1.00 26.86        N
ATOM  6199 CA  LEU B 363    16.062 16.560 67.347 1.00 26.19        C
ATOM  6201 CB  LEU B 363    16.284 16.250 65.863 1.00 26.56        C
ATOM  6204 CG  LEU B 363    17.691 16.558 65.383 1.00 25.98        C
ATOM  6206 CD1 LEU B 363    17.832 16.210 63.925 1.00 26.41        C
ATOM  6210 CD2 LEU B 363    17.982 18.007 65.616 1.00 28.05        C
ATOM  6214 C   LEU B 363    14.583 16.548 67.632 1.00 25.35        C
ATOM  6215 O   LEU B 363    13.912 17.494 67.326 1.00 25.36        O
ATOM  6216 N   GLY B 364    14.061 15.456 68.163 1.00 24.96        N
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ATOM  6218  CA  GLY B 364    12.648 15.379 68.501 1.00 24.26        C
ATOM  6221  C   GLY B 364    11.724 15.691 67.343 1.00 23.80        C
ATOM  6222  O   GLY B 364    10.814 16.502 67.481 1.00 24.22        O
ATOM  6223  N   LEU B 365    11.953 15.056 66.195 1.00 23.27        N
ATOM  6225  CA  LEU B 365    11.122 15.300 65.028 1.00 23.05        C
ATOM  6227  CB  LEU B 365    11.695 14.622 63.777 1.00 22.95        C
ATOM  6230  CG  LEU B 365    13.100 14.889 63.236 1.00 24.40        C
ATOM  6232  CD1 LEU B 365    13.116 14.608 61.771 1.00 26.37        C
ATOM  6236  CD2 LEU B 365    13.574 16.268 63.444 1.00 25.76        C
ATOM  6240  C   LEU B 365    9.713  14.754 65.254 1.00 22.55        C
ATOM  6241  O   LEU B 365    9.541  13.661 65.776 1.00 21.66        O
ATOM  6242  N   ASP B 366    8.716  15.503 64.821 1.00 22.33        N
ATOM  6244  CA  ASP B 366    7.357  14.999 64.806 1.00 22.52        C
ATOM  6246  CB  ASP B 366    6.358  16.137 65.116 1.00 22.86        C
ATOM  6249  CG  ASP B 366    6.347  17.260 64.089 1.00 23.02        C
ATOM  6250  OD1 ASP B 366    6.755  17.051 62.929 1.00 24.65        O
ATOM  6251  OD2 ASP B 366    5.909  18.405 64.382 1.00 23.11        O
ATOM  6252  C   ASP B 366    7.066  14.218 63.490 1.00 22.72        C
ATOM  6253  O   ASP B 366    8.012  13.887 62.722 1.00 23.30        O
ATOM  6254  N   ASP B 367    5.800  13.881 63.262 1.00 21.59        N
ATOM  6256  CA  ASP B 367    5.362  13.148 62.071 1.00 21.79        C
ATOM  6258  CB  ASP B 367    3.845  12.838 62.134 1.00 22.31        C
ATOM  6261  CG  ASP B 367    3.471  11.840 63.205 1.00 23.80        C
ATOM  6262  OD1 ASP B 367    4.366  11.222 63.788 1.00 25.82        O
ATOM  6263  OD2 ASP B 367    2.275  11.591 63.517 1.00 29.95        O
ATOM  6264  C   ASP B 367    5.570  13.895 60.760 1.00 21.22        C
ATOM  6265  O   ASP B 367    5.936  13.290 59.780 1.00 21.08        O
ATOM  6266  N   ALA B 368    5.231  15.178 60.725 1.00 21.32        N
ATOM  6268  CA  ALA B 368    5.378  16.003 59.521 1.00 21.50        C
ATOM  6270  CB  ALA B 368    4.779  17.356 59.731 1.00 21.08        C
ATOM  6274  C   ALA B 368    6.861  16.145 59.141 1.00 22.22        C
ATOM  6275  O   ALA B 368    7.217  16.110 57.970 1.00 22.94        O
ATOM  6276  N   GLU B 369    7.724  16.275 60.140 1.00 21.58        N
ATOM  6278  CA  GLU B 369    9.144  16.389 59.878 1.00 21.28        C
ATOM  6280  CB  GLU B 369    9.855  16.904 61.119 1.00 20.76        C
ATOM  6283  CG  GLU B 369    9.515  18.345 61.390 1.00 20.19        C
ATOM  6286  CD  GLU B 369    9.953  18.786 62.760 1.00 22.59        C
ATOM  6287  OE1 GLU B 369    10.285 19.973 62.899 1.00 22.51        O
ATOM  6288  OE2 GLU B 369    9.964  17.950 63.697 1.00 22.21        O
ATOM  6289  C   GLU B 369    9.804  15.099 59.373 1.00 21.09        C
ATOM  6290  O   GLU B 369    10.580 15.172 58.454 1.00 20.01        O
ATOM  6291  N   TYR B 370    9.520  13.943 59.994 1.00 21.24        N
ATOM  6293  CA  TYR B 370    9.988  12.643 59.473 1.00 21.31        C
ATOM  6295  CB  TYR B 370    9.540  11.471 60.364 1.00 20.77        C
ATOM  6298  CG  TYR B 370    10.539 11.079 61.446 1.00 19.87        C
ATOM  6299  CD1 TYR B 370    10.303 11.338 62.823 1.00 20.47        C
ATOM  6301  CE1 TYR B 370    11.250 10.951 63.809 1.00 18.80        C
ATOM  6303  CZ  TYR B 370    12.420 10.325 63.377 1.00 20.52        C
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| ATOM | 6304 | OH | TYR B 370 | 13.403 | 9.900 | 64.210 | 1.00 | 25.00 | O |
| ATOM | 6306 | CE2 | TYR B 370 | 12.628 | 10.059 | 62.054 | 1.00 | 19.04 | C |
| ATOM | 6308 | CD2 | TYR B 370 | 11.695 | 10.431 | 61.107 | 1.00 | 17.94 | C |
| ATOM | 6310 | C | TYR B 370 | 9.504 | 12.422 | 58.020 | 1.00 | 22.05 | C |
| ATOM | 6311 | O | TYR B 370 | 10.280 | 12.030 | 57.132 | 1.00 | 22.17 | O |
| ATOM | 6312 | N | ALA B 371 | 8.244 | 12.730 | 57.751 | 1.00 | 22.06 | N |
| ATOM | 6314 | CA | ALA B 371 | 7.698 | 12.421 | 56.437 | 1.00 | 22.69 | C |
| ATOM | 6316 | CB | ALA B 371 | 6.182 | 12.587 | 56.404 | 1.00 | 22.87 | C |
| ATOM | 6320 | C | ALA B 371 | 8.359 | 13.261 | 55.371 | 1.00 | 22.57 | C |
| ATOM | 6321 | O | ALA B 371 | 8.706 | 12.767 | 54.311 | 1.00 | 23.55 | O |
| ATOM | 6322 | N | LEU B 372 | 8.548 | 14.539 | 55.652 | 1.00 | 22.74 | N |
| ATOM | 6324 | CA | LEU B 372 | 9.180 | 15.440 | 54.698 | 1.00 | 21.26 | C |
| ATOM | 6326 | CB | LEU B 372 | 9.105 | 16.859 | 55.216 | 1.00 | 21.25 | C |
| ATOM | 6329 | CG | LEU B 372 | 7.689 | 17.431 | 55.202 | 1.00 | 18.39 | C |
| ATOM | 6331 | CD1 | LEU B 372 | 7.624 | 18.763 | 55.992 | 1.00 | 18.33 | C |
| ATOM | 6335 | CD2 | LEU B 372 | 7.225 | 17.620 | 53.763 | 1.00 | 15.93 | C |
| ATOM | 6339 | C | LEU B 372 | 10.611 | 15.052 | 54.473 | 1.00 | 21.77 | C |
| ATOM | 6340 | O | LEU B 372 | 11.077 | 15.043 | 53.328 | 1.00 | 21.68 | O |
| ATOM | 6341 | N | LEU B 373 | 11.323 | 14.708 | 55.548 | 1.00 | 21.56 | N |
| ATOM | 6343 | CA | LEU B 373 | 12.721 | 14.252 | 55.409 | 1.00 | 21.75 | C |
| ATOM | 6345 | CB | LEU B 373 | 13.334 | 13.852 | 56.743 | 1.00 | 22.45 | C |
| ATOM | 6348 | CG | LEU B 373 | 14.494 | 14.616 | 57.324 | 1.00 | 25.72 | C |
| ATOM | 6350 | CD1 | LEU B 373 | 15.057 | 13.823 | 58.512 | 1.00 | 28.43 | C |
| ATOM | 6354 | CD2 | LEU B 373 | 15.570 | 14.831 | 56.300 | 1.00 | 29.29 | C |
| ATOM | 6358 | C | LEU B 373 | 12.825 | 13.055 | 54.497 | 1.00 | 20.74 | C |
| ATOM | 6359 | O | LEU B 373 | 13.737 | 12.942 | 53.702 | 1.00 | 19.81 | O |
| ATOM | 6360 | N | ILE B 374 | 11.886 | 12.137 | 54.642 | 1.00 | 21.08 | N |
| ATOM | 6362 | CA | ILE B 374 | 11.846 | 10.939 | 53.817 | 1.00 | 20.57 | C |
| ATOM | 6364 | CB | ILE B 374 | 10.747 | 10.013 | 54.335 | 1.00 | 20.39 | C |
| ATOM | 6366 | CG1 | ILE B 374 | 11.229 | 9.286 | 55.577 | 1.00 | 20.95 | C |
| ATOM | 6369 | CD1 | ILE B 374 | 10.125 | 8.645 | 56.372 | 1.00 | 22.08 | C |
| ATOM | 6373 | CG2 | ILE B 374 | 10.306 | 8.997 | 53.280 | 1.00 | 20.41 | C |
| ATOM | 6377 | C | ILE B 374 | 11.633 | 11.339 | 52.344 | 1.00 | 21.21 | C |
| ATOM | 6378 | O | ILE B 374 | 12.390 | 10.936 | 51.490 | 1.00 | 22.26 | O |
| ATOM | 6379 | N | ALA B 375 | 10.633 | 12.154 | 52.046 | 1.00 | 21.55 | N |
| ATOM | 6381 | CA | ALA B 375 | 10.410 | 12.616 | 50.662 | 1.00 | 21.80 | C |
| ATOM | 6383 | CB | ALA B 375 | 9.202 | 13.536 | 50.590 | 1.00 | 22.06 | C |
| ATOM | 6387 | C | ALA B 375 | 11.635 | 13.314 | 50.077 | 1.00 | 21.85 | C |
| ATOM | 6388 | O | ALA B 375 | 11.967 | 13.118 | 48.893 | 1.00 | 21.92 | O |
| ATOM | 6389 | N | ILE B 376 | 12.318 | 14.114 | 50.897 | 1.00 | 21.50 | N |
| ATOM | 6391 | CA | ILE B 376 | 13.541 | 14.782 | 50.457 | 1.00 | 21.19 | C |
| ATOM | 6393 | CB | ILE B 376 | 14.041 | 15.802 | 51.532 | 1.00 | 20.88 | C |
| ATOM | 6395 | CG1 | ILE B 376 | 13.075 | 16.989 | 51.633 | 1.00 | 21.76 | C |
| ATOM | 6398 | CD1 | ILE B 376 | 13.262 | 17.836 | 52.954 | 1.00 | 23.09 | C |
| ATOM | 6402 | CG2 | ILE B 376 | 15.469 | 16.325 | 51.249 | 1.00 | 18.77 | C |
| ATOM | 6406 | C | ILE B 376 | 14.607 | 13.720 | 50.128 | 1.00 | 21.39 | C |
| ATOM | 6407 | O | ILE B 376 | 15.337 | 13.852 | 49.181 | 1.00 | 21.54 | O |
| ATOM | 6408 | N | ASN B 377 | 14.676 | 12.672 | 50.929 | 1.00 | 21.99 | N |

| ATOM | 6410 | CA | ASN B 377 | 15.626 | 11.580 | 50.735 | 1.00 | 21.62 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 6412 | CB | ASN B 377 | 15.584 | 10.615 | 51.929 | 1.00 | 21.16 | C |
| ATOM | 6415 | CG | ASN B 377 | 16.707 | 9.585 | 51.892 | 1.00 | 22.85 | C |
| ATOM | 6416 | OD1 | ASN B 377 | 17.801 | 9.787 | 52.439 | 1.00 | 26.20 | O |
| ATOM | 6417 | ND2 | ASN B 377 | 16.451 | 8.492 | 51.231 | 1.00 | 23.87 | N |
| ATOM | 6420 | C | ASN B 377 | 15.384 | 10.825 | 49.426 | 1.00 | 21.04 | C |
| ATOM | 6421 | O | ASN B 377 | 16.333 | 10.529 | 48.695 | 1.00 | 21.12 | O |
| ATOM | 6422 | N | ILE B 378 | 14.125 | 10.537 | 49.136 | 1.00 | 20.01 | N |
| ATOM | 6424 | CA | ILE B 378 | 13.728 | 9.918 | 47.866 | 1.00 | 20.25 | C |
| ATOM | 6426 | CB | ILE B 378 | 12.192 | 9.710 | 47.841 | 1.00 | 20.41 | C |
| ATOM | 6428 | CG1 | ILE B 378 | 11.834 | 8.657 | 48.899 | 1.00 | 21.58 | C |
| ATOM | 6431 | CD1 | ILE B 378 | 10.412 | 8.370 | 49.038 | 1.00 | 23.80 | C |
| ATOM | 6435 | CG2 | ILE B 378 | 11.714 | 9.248 | 46.466 | 1.00 | 20.06 | C |
| ATOM | 6439 | C | ILE B 378 | 14.164 | 10.713 | 46.655 | 1.00 | 20.30 | C |
| ATOM | 6440 | O | ILE B 378 | 14.673 | 10.146 | 45.685 | 1.00 | 20.64 | O |
| ATOM | 6441 | N | PHE B 379 | 13.975 | 12.032 | 46.688 | 1.00 | 20.97 | N |
| ATOM | 6443 | CA | PHE B 379 | 14.327 | 12.868 | 45.533 | 1.00 | 20.85 | C |
| ATOM | 6445 | CB | PHE B 379 | 13.307 | 13.978 | 45.325 | 1.00 | 21.03 | C |
| ATOM | 6448 | CG | PHE B 379 | 11.938 | 13.483 | 45.028 | 1.00 | 18.73 | C |
| ATOM | 6449 | CD1 | PHE B 379 | 10.895 | 13.715 | 45.904 | 1.00 | 19.42 | C |
| ATOM | 6451 | CE1 | PHE B 379 | 9.595 | 13.260 | 45.618 | 1.00 | 18.25 | C |
| ATOM | 6453 | CZ | PHE B 379 | 9.358 | 12.588 | 44.424 | 1.00 | 19.28 | C |
| ATOM | 6455 | CE2 | PHE B 379 | 10.394 | 12.365 | 43.550 | 1.00 | 19.35 | C |
| ATOM | 6457 | CD2 | PHE B 379 | 11.675 | 12.824 | 43.848 | 1.00 | 20.53 | C |
| ATOM | 6459 | C | PHE B 379 | 15.734 | 13.437 | 45.618 | 1.00 | 21.55 | C |
| ATOM | 6460 | O | PHE B 379 | 15.928 | 14.630 | 45.451 | 1.00 | 21.95 | O |
| ATOM | 6461 | N | SER B 380 | 16.716 | 12.566 | 45.849 | 1.00 | 22.01 | N |
| ATOM | 6463 | CA | SER B 380 | 18.141 | 12.921 | 45.766 | 1.00 | 22.48 | C |
| ATOM | 6465 | CB | SER B 380 | 18.977 | 12.086 | 46.752 | 1.00 | 22.20 | C |
| ATOM | 6468 | OG | SER B 380 | 18.295 | 11.940 | 47.977 | 1.00 | 21.09 | O |
| ATOM | 6470 | C | SER B 380 | 18.678 | 12.677 | 44.389 | 1.00 | 22.12 | C |
| ATOM | 6471 | O | SER B 380 | 18.734 | 11.575 | 43.966 | 1.00 | 22.42 | O |
| ATOM | 6472 | N | ALA B 381 | 19.158 | 13.709 | 43.728 | 1.00 | 24.24 | N |
| ATOM | 6474 | CA | ALA B 381 | 19.547 | 13.663 | 42.304 | 1.00 | 24.67 | C |
| ATOM | 6476 | CB | ALA B 381 | 19.458 | 15.063 | 41.711 | 1.00 | 24.77 | C |
| ATOM | 6480 | C | ALA B 381 | 20.937 | 13.107 | 42.055 | 1.00 | 25.40 | C |
| ATOM | 6481 | O | ALA B 381 | 21.322 | 12.885 | 40.900 | 1.00 | 26.89 | O |
| ATOM | 6482 | N | ASP B 382 | 21.715 | 12.895 | 43.110 | 1.00 | 24.87 | N |
| ATOM | 6484 | CA | ASP B 382 | 23.031 | 12.317 | 42.942 | 1.00 | 24.87 | C |
| ATOM | 6486 | CB | ASP B 382 | 23.974 | 12.947 | 43.964 | 1.00 | 25.09 | C |
| ATOM | 6489 | CG | ASP B 382 | 23.696 | 12.451 | 45.357 | 1.00 | 26.78 | C |
| ATOM | 6490 | OD1 | ASP B 382 | 22.509 | 12.291 | 45.704 | 1.00 | 28.37 | O |
| ATOM | 6491 | OD2 | ASP B 382 | 24.589 | 12.135 | 46.160 | 1.00 | 28.69 | O |
| ATOM | 6492 | C | ASP B 382 | 23.066 | 10.776 | 43.074 | 1.00 | 24.13 | C |
| ATOM | 6493 | O | ASP B 382 | 24.125 | 10.200 | 43.316 | 1.00 | 24.36 | O |
| ATOM | 6494 | N | ARG B 383 | 21.928 | 10.095 | 42.957 | 1.00 | 23.11 | N |
| ATOM | 6496 | CA | ARG B 383 | 21.933 | 8.634 | 43.049 | 1.00 | 21.78 | C |
| ATOM | 6498 | CB | ARG B 383 | 20.518 | 8.111 | 43.232 | 1.00 | 21.83 | C |

| ATOM | 6501 | CG  | ARG B 383 | 19.814 | 8.623  | 44.440 | 1.00 | 20.99 | C |
| ATOM | 6504 | CD  | ARG B 383 | 20.545 | 8.433  | 45.741 | 1.00 | 20.33 | C |
| ATOM | 6507 | NE  | ARG B 383 | 19.596 | 8.511  | 46.864 | 1.00 | 21.84 | N |
| ATOM | 6509 | CZ  | ARG B 383 | 19.918 | 8.333  | 48.131 | 1.00 | 21.53 | C |
| ATOM | 6510 | NH1 | ARG B 383 | 21.145 | 8.007  | 48.472 | 1.00 | 20.87 | N |
| ATOM | 6513 | NH2 | ARG B 383 | 18.980 | 8.408  | 49.059 | 1.00 | 23.87 | N |
| ATOM | 6516 | C   | ARG B 383 | 22.505 | 8.056  | 41.760 | 1.00 | 21.41 | C |
| ATOM | 6517 | O   | ARG B 383 | 22.374 | 8.667  | 40.709 | 1.00 | 21.61 | O |
| ATOM | 6518 | N   | PRO B 384 | 23.090 | 6.869  | 41.801 | 1.00 | 20.87 | N |
| ATOM | 6519 | CA  | PRO B 384 | 23.582 | 6.251  | 40.559 | 1.00 | 20.64 | C |
| ATOM | 6521 | CB  | PRO B 384 | 24.368 | 5.002  | 41.035 | 1.00 | 20.73 | C |
| ATOM | 6524 | CG  | PRO B 384 | 24.050 | 4.814  | 42.506 | 1.00 | 20.95 | C |
| ATOM | 6527 | CD  | PRO B 384 | 23.284 | 6.012  | 42.984 | 1.00 | 20.98 | C |
| ATOM | 6530 | C   | PRO B 384 | 22.442 | 5.862  | 39.582 | 1.00 | 19.58 | C |
| ATOM | 6531 | O   | PRO B 384 | 21.321 | 5.562  | 39.988 | 1.00 | 19.38 | O |
| ATOM | 6532 | N   | ASN B 385 | 22.773 | 5.923  | 38.300 | 1.00 | 19.15 | N |
| ATOM | 6534 | CA  | ASN B 385 | 21.928 | 5.546  | 37.187 | 1.00 | 18.87 | C |
| ATOM | 6536 | CB  | ASN B 385 | 21.539 | 4.064  | 37.266 | 1.00 | 19.17 | C |
| ATOM | 6539 | CG  | ASN B 385 | 22.741 | 3.138  | 37.378 | 1.00 | 19.97 | C |
| ATOM | 6540 | OD1 | ASN B 385 | 22.846 | 2.358  | 38.322 | 1.00 | 23.24 | O |
| ATOM | 6541 | ND2 | ASN B 385 | 23.634 | 3.212  | 36.422 | 1.00 | 19.17 | N |
| ATOM | 6544 | C   | ASN B 385 | 20.677 | 6.412  | 37.009 | 1.00 | 18.90 | C |
| ATOM | 6545 | O   | ASN B 385 | 19.758 | 6.015  | 36.312 | 1.00 | 19.01 | O |
| ATOM | 6546 | N   | VAL B 386 | 20.630 | 7.595  | 37.609 | 1.00 | 18.05 | N |
| ATOM | 6548 | CA  | VAL B 386 | 19.492 | 8.466  | 37.390 | 1.00 | 18.00 | C |
| ATOM | 6550 | CB  | VAL B 386 | 19.341 | 9.452  | 38.535 | 1.00 | 17.77 | C |
| ATOM | 6552 | CG1 | VAL B 386 | 18.322 | 10.502 | 38.195 | 1.00 | 18.53 | C |
| ATOM | 6556 | CG2 | VAL B 386 | 18.920 | 8.706  | 39.830 | 1.00 | 18.13 | C |
| ATOM | 6560 | C   | VAL B 386 | 19.667 | 9.161  | 36.023 | 1.00 | 18.53 | C |
| ATOM | 6561 | O   | VAL B 386 | 20.736 | 9.692  | 35.730 | 1.00 | 18.62 | O |
| ATOM | 6562 | N   | GLN B 387 | 18.632 | 9.112  | 35.179 | 1.00 | 18.75 | N |
| ATOM | 6564 | CA  | GLN B 387 | 18.670 | 9.694  | 33.829 | 1.00 | 18.96 | C |
| ATOM | 6566 | CB  | GLN B 387 | 17.850 | 8.854  | 32.889 | 1.00 | 19.60 | C |
| ATOM | 6569 | CG  | GLN B 387 | 18.514 | 7.502  | 32.605 | 1.00 | 23.43 | C |
| ATOM | 6572 | CD  | GLN B 387 | 17.662 | 6.666  | 31.704 | 1.00 | 27.31 | C |
| ATOM | 6573 | OE1 | GLN B 387 | 17.705 | 6.860  | 30.486 | 1.00 | 33.18 | O |
| ATOM | 6574 | NE2 | GLN B 387 | 16.866 | 5.751  | 32.272 | 1.00 | 26.97 | N |
| ATOM | 6577 | C   | GLN B 387 | 18.188 | 11.128 | 33.743 | 1.00 | 18.62 | C |
| ATOM | 6578 | O   | GLN B 387 | 18.598 | 11.841 | 32.854 | 1.00 | 17.67 | O |
| ATOM | 6579 | N   | GLU B 388 | 17.328 | 11.555 | 34.672 | 1.00 | 18.51 | N |
| ATOM | 6581 | CA  | GLU B 388 | 16.893 | 12.948 | 34.726 | 1.00 | 18.71 | C |
| ATOM | 6583 | CB  | GLU B 388 | 15.406 | 13.064 | 34.376 | 1.00 | 19.03 | C |
| ATOM | 6586 | CG  | GLU B 388 | 15.119 | 12.747 | 32.925 | 1.00 | 20.30 | C |
| ATOM | 6589 | CD  | GLU B 388 | 13.677 | 12.993 | 32.593 | 1.00 | 21.79 | C |
| ATOM | 6590 | OE1 | GLU B 388 | 12.907 | 12.005 | 32.582 | 1.00 | 24.61 | O |
| ATOM | 6591 | OE2 | GLU B 388 | 13.324 | 14.167 | 32.345 | 1.00 | 20.18 | O |
| ATOM | 6592 | C   | GLU B 388 | 17.173 | 13.573 | 36.091 | 1.00 | 18.20 | C |
| ATOM | 6593 | O   | GLU B 388 | 16.247 | 13.948 | 36.787 | 1.00 | 17.43 | O |

| ATOM | 6594 | N | PRO | B | 389 | 18.453 | 13.702 | 36.462 | 1.00 | 18.44 | N |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 6595 | CA | PRO | B | 389 | 18.815 | 14.248 | 37.773 | 1.00 | 18.55 | C |
| ATOM | 6597 | CB | PRO | B | 389 | 20.346 | 14.213 | 37.776 | 1.00 | 19.60 | C |
| ATOM | 6600 | CG | PRO | B | 389 | 20.783 | 13.940 | 36.330 | 1.00 | 17.71 | C |
| ATOM | 6603 | CD | PRO | B | 389 | 19.641 | 13.313 | 35.664 | 1.00 | 17.77 | C |
| ATOM | 6606 | C | PRO | B | 389 | 18.303 | 15.665 | 38.029 | 1.00 | 19.06 | C |
| ATOM | 6607 | O | PRO | B | 389 | 17.938 | 15.957 | 39.172 | 1.00 | 20.06 | O |
| ATOM | 6608 | N | GLY | B | 390 | 18.252 | 16.525 | 37.018 | 1.00 | 18.94 | N |
| ATOM | 6610 | CA | GLY | B | 390 | 17.707 | 17.878 | 37.178 | 1.00 | 18.72 | C |
| ATOM | 6613 | C | GLY | B | 390 | 16.244 | 17.849 | 37.526 | 1.00 | 18.89 | C |
| ATOM | 6614 | O | GLY | B | 390 | 15.744 | 18.568 | 38.368 | 1.00 | 19.36 | O |
| ATOM | 6615 | N | ARG | B | 391 | 15.545 | 16.955 | 36.876 | 1.00 | 19.62 | N |
| ATOM | 6617 | CA | ARG | B | 391 | 14.146 | 16.715 | 37.160 | 1.00 | 20.15 | C |
| ATOM | 6619 | CB | ARG | B | 391 | 13.645 | 15.740 | 36.124 | 1.00 | 20.61 | C |
| ATOM | 6622 | CG | ARG | B | 391 | 12.195 | 15.593 | 36.115 | 1.00 | 24.70 | C |
| ATOM | 6625 | CD | ARG | B | 391 | 11.492 | 16.493 | 35.187 | 1.00 | 29.28 | C |
| ATOM | 6628 | NE | ARG | B | 391 | 10.232 | 15.812 | 34.933 | 1.00 | 34.22 | N |
| ATOM | 6630 | CZ | ARG | B | 391 | 9.037 | 16.308 | 35.165 | 1.00 | 37.37 | C |
| ATOM | 6631 | NH1 | ARG | B | 391 | 8.862 | 17.557 | 35.639 | 1.00 | 37.23 | N |
| ATOM | 6634 | NH2 | ARG | B | 391 | 7.999 | 15.534 | 34.887 | 1.00 | 39.85 | N |
| ATOM | 6637 | C | ARG | B | 391 | 13.904 | 16.196 | 38.573 | 1.00 | 19.58 | C |
| ATOM | 6638 | O | ARG | B | 391 | 12.973 | 16.602 | 39.248 | 1.00 | 20.55 | O |
| ATOM | 6639 | N | VAL | B | 392 | 14.766 | 15.327 | 39.057 | 1.00 | 19.61 | N |
| ATOM | 6641 | CA | VAL | B | 392 | 14.648 | 14.844 | 40.428 | 1.00 | 19.35 | C |
| ATOM | 6643 | CB | VAL | B | 392 | 15.645 | 13.683 | 40.694 | 1.00 | 19.17 | C |
| ATOM | 6645 | CG1 | VAL | B | 392 | 15.677 | 13.306 | 42.168 | 1.00 | 17.59 | C |
| ATOM | 6649 | CG2 | VAL | B | 392 | 15.276 | 12.483 | 39.856 | 1.00 | 19.32 | C |
| ATOM | 6653 | C | VAL | B | 392 | 14.889 | 15.984 | 41.415 | 1.00 | 19.99 | C |
| ATOM | 6654 | O | VAL | B | 392 | 14.266 | 16.037 | 42.462 | 1.00 | 19.77 | O |
| ATOM | 6655 | N | GLU | B | 393 | 15.814 | 16.880 | 41.102 | 1.00 | 21.29 | N |
| ATOM | 6657 | CA | GLU | B | 393 | 16.120 | 17.986 | 41.998 | 1.00 | 22.72 | C |
| ATOM | 6659 | CB | GLU | B | 393 | 17.387 | 18.707 | 41.562 | 1.00 | 23.91 | C |
| ATOM | 6662 | CG | GLU | B | 393 | 17.816 | 19.798 | 42.531 | 1.00 | 27.69 | C |
| ATOM | 6665 | CD | GLU | B | 393 | 19.290 | 20.112 | 42.440 | 1.00 | 33.96 | C |
| ATOM | 6666 | OE1 | GLU | B | 393 | 19.993 | 19.930 | 43.467 | 1.00 | 40.25 | O |
| ATOM | 6667 | OE2 | GLU | B | 393 | 19.751 | 20.546 | 41.346 | 1.00 | 37.57 | O |
| ATOM | 6668 | C | GLU | B | 393 | 14.975 | 18.957 | 42.032 | 1.00 | 22.64 | C |
| ATOM | 6669 | O | GLU | B | 393 | 14.656 | 19.485 | 43.076 | 1.00 | 24.10 | O |
| ATOM | 6670 | N | ALA | B | 394 | 14.320 | 19.166 | 40.900 | 1.00 | 22.81 | N |
| ATOM | 6672 | CA | ALA | B | 394 | 13.176 | 20.066 | 40.863 | 1.00 | 22.69 | C |
| ATOM | 6674 | CB | ALA | B | 394 | 12.795 | 20.396 | 39.450 | 1.00 | 22.06 | C |
| ATOM | 6678 | C | ALA | B | 394 | 11.981 | 19.467 | 41.617 | 1.00 | 23.03 | C |
| ATOM | 6679 | O | ALA | B | 394 | 11.202 | 20.231 | 42.181 | 1.00 | 23.92 | O |
| ATOM | 6680 | N | LEU | B | 395 | 11.816 | 18.131 | 41.634 | 1.00 | 22.54 | N |
| ATOM | 6682 | CA | LEU | B | 395 | 10.742 | 17.525 | 42.445 | 1.00 | 21.91 | C |
| ATOM | 6684 | CB | LEU | B | 395 | 10.406 | 16.116 | 41.975 | 1.00 | 22.77 | C |
| ATOM | 6687 | CG | LEU | B | 395 | 9.971 | 15.956 | 40.516 | 1.00 | 24.05 | C |
| ATOM | 6689 | CD1 | LEU | B | 395 | 9.943 | 14.498 | 40.103 | 1.00 | 27.97 | C |

| ATOM | 6693 | CD2 | LEU | B 395 | 8.618 | 16.573 | 40.261 | 1.00 | 25.94 | C |
| ATOM | 6697 | C | LEU | B 395 | 11.065 | 17.528 | 43.939 | 1.00 | 21.66 | C |
| ATOM | 6698 | O | LEU | B 395 | 10.176 | 17.494 | 44.774 | 1.00 | 22.24 | O |
| ATOM | 6699 | N | GLN | B 396 | 12.342 | 17.606 | 44.282 | 1.00 | 21.70 | N |
| ATOM | 6701 | CA | GLN | B 396 | 12.774 | 17.642 | 45.662 | 1.00 | 21.46 | C |
| ATOM | 6703 | CB | GLN | B 396 | 14.290 | 17.407 | 45.748 | 1.00 | 21.16 | C |
| ATOM | 6706 | CG | GLN | B 396 | 14.762 | 17.278 | 47.157 | 1.00 | 19.91 | C |
| ATOM | 6709 | CD | GLN | B 396 | 16.242 | 17.271 | 47.304 | 1.00 | 18.53 | C |
| ATOM | 6710 | OE1 | GLN | B 396 | 16.814 | 16.357 | 47.872 | 1.00 | 21.58 | O |
| ATOM | 6711 | NE2 | GLN | B 396 | 16.853 | 18.307 | 46.880 | 1.00 | 19.04 | N |
| ATOM | 6714 | C | GLN | B 396 | 12.512 | 18.999 | 46.310 | 1.00 | 22.42 | C |
| ATOM | 6715 | O | GLN | B 396 | 12.311 | 19.083 | 47.531 | 1.00 | 22.74 | O |
| ATOM | 6716 | N | GLN | B 397 | 12.609 | 20.059 | 45.515 | 1.00 | 21.79 | N |
| ATOM | 6718 | CA | GLN | B 397 | 12.642 | 21.406 | 46.061 | 1.00 | 22.10 | C |
| ATOM | 6720 | CB | GLN | B 397 | 12.921 | 22.426 | 44.932 | 1.00 | 21.93 | C |
| ATOM | 6723 | CG | GLN | B 397 | 12.340 | 23.784 | 45.175 | 1.00 | 25.00 | C |
| ATOM | 6726 | CD | GLN | B 397 | 12.712 | 24.823 | 44.098 | 1.00 | 27.36 | C |
| ATOM | 6727 | OE1 | GLN | B 397 | 13.741 | 24.712 | 43.446 | 1.00 | 29.73 | O |
| ATOM | 6728 | NE2 | GLN | B 397 | 11.843 | 25.817 | 43.907 | 1.00 | 28.44 | N |
| ATOM | 6731 | C | GLN | B 397 | 11.399 | 21.804 | 46.892 | 1.00 | 21.10 | C |
| ATOM | 6732 | O | GLN | B 397 | 11.548 | 22.460 | 47.924 | 1.00 | 20.27 | O |
| ATOM | 6733 | N | PRO | B 398 | 10.197 | 21.491 | 46.413 | 1.00 | 20.27 | N |
| ATOM | 6734 | CA | PRO | B 398 | 8.978 | 21.775 | 47.170 | 1.00 | 20.48 | C |
| ATOM | 6736 | CB | PRO | B 398 | 7.853 | 21.157 | 46.285 | 1.00 | 20.46 | C |
| ATOM | 6739 | CG | PRO | B 398 | 8.399 | 21.083 | 44.907 | 1.00 | 20.28 | C |
| ATOM | 6742 | CD | PRO | B 398 | 9.897 | 20.933 | 45.078 | 1.00 | 20.66 | C |
| ATOM | 6745 | C | PRO | B 398 | 8.955 | 21.149 | 48.595 | 1.00 | 20.52 | C |
| ATOM | 6746 | O | PRO | B 398 | 8.406 | 21.758 | 49.513 | 1.00 | 19.86 | O |
| ATOM | 6747 | N | TYR | B 399 | 9.513 | 19.947 | 48.736 | 1.00 | 19.95 | N |
| ATOM | 6749 | CA | TYR | B 399 | 9.694 | 19.267 | 50.017 | 1.00 | 19.66 | C |
| ATOM | 6751 | CB | TYR | B 399 | 10.095 | 17.794 | 49.771 | 1.00 | 19.96 | C |
| ATOM | 6754 | CG | TYR | B 399 | 8.992 | 17.060 | 49.082 | 1.00 | 20.60 | C |
| ATOM | 6755 | CD1 | TYR | B 399 | 9.067 | 16.731 | 47.722 | 1.00 | 21.38 | C |
| ATOM | 6757 | CE1 | TYR | B 399 | 7.972 | 16.080 | 47.079 | 1.00 | 20.43 | C |
| ATOM | 6759 | CZ | TYR | B 399 | 6.844 | 15.797 | 47.808 | 1.00 | 18.83 | C |
| ATOM | 6760 | OH | TYR | B 399 | 5.769 | 15.177 | 47.250 | 1.00 | 21.91 | O |
| ATOM | 6762 | CE2 | TYR | B 399 | 6.764 | 16.139 | 49.136 | 1.00 | 18.87 | C |
| ATOM | 6764 | CD2 | TYR | B 399 | 7.815 | 16.777 | 49.758 | 1.00 | 18.80 | C |
| ATOM | 6766 | C | TYR | B 399 | 10.702 | 19.951 | 50.936 | 1.00 | 19.16 | C |
| ATOM | 6767 | O | TYR | B 399 | 10.465 | 20.049 | 52.148 | 1.00 | 18.16 | O |
| ATOM | 6768 | N | VAL | B 400 | 11.812 | 20.431 | 50.376 | 1.00 | 18.94 | N |
| ATOM | 6770 | CA | VAL | B 400 | 12.788 | 21.216 | 51.140 | 1.00 | 18.36 | C |
| ATOM | 6772 | CB | VAL | B 400 | 14.078 | 21.510 | 50.338 | 1.00 | 18.34 | C |
| ATOM | 6774 | CG1 | VAL | B 400 | 15.057 | 22.361 | 51.158 | 1.00 | 17.60 | C |
| ATOM | 6778 | CG2 | VAL | B 400 | 14.805 | 20.218 | 49.978 | 1.00 | 18.78 | C |
| ATOM | 6782 | C | VAL | B 400 | 12.126 | 22.509 | 51.633 | 1.00 | 19.10 | C |
| ATOM | 6783 | O | VAL | B 400 | 12.266 | 22.901 | 52.793 | 1.00 | 18.63 | O |
| ATOM | 6784 | N | GLU | B 401 | 11.363 | 23.137 | 50.752 | 1.00 | 19.95 | N |

| ATOM | 6786 | CA | GLU B 401 | 10.660 | 24.396 | 51.040 | 1.00 | 20.81 | C |
| ATOM | 6788 | CB | GLU B 401 | 9.980 | 24.887 | 49.769 | 1.00 | 21.64 | C |
| ATOM | 6791 | CG | GLU B 401 | 9.504 | 26.324 | 49.799 | 1.00 | 27.75 | C |
| ATOM | 6794 | CD | GLU B 401 | 10.501 | 27.293 | 49.155 | 1.00 | 36.68 | C |
| ATOM | 6795 | OE1 | GLU B 401 | 10.588 | 28.481 | 49.617 | 1.00 | 38.68 | O |
| ATOM | 6796 | OE2 | GLU B 401 | 11.197 | 26.868 | 48.179 | 1.00 | 41.81 | O |
| ATOM | 6797 | C | GLU B 401 | 9.629 | 24.230 | 52.155 | 1.00 | 19.84 | C |
| ATOM | 6798 | O | GLU B 401 | 9.589 | 25.014 | 53.106 | 1.00 | 18.68 | O |
| ATOM | 6799 | N | ALA B 402 | 8.838 | 23.157 | 52.064 | 1.00 | 19.81 | N |
| ATOM | 6801 | CA | ALA B 402 | 7.834 | 22.859 | 53.078 | 1.00 | 19.56 | C |
| ATOM | 6803 | CB | ALA B 402 | 6.939 | 21.709 | 52.631 | 1.00 | 19.65 | C |
| ATOM | 6807 | C | ALA B 402 | 8.477 | 22.517 | 54.406 | 1.00 | 19.45 | C |
| ATOM | 6808 | O | ALA B 402 | 7.937 | 22.861 | 55.450 | 1.00 | 19.63 | O |
| ATOM | 6809 | N | LEU B 403 | 9.602 | 21.803 | 54.382 | 1.00 | 18.88 | N |
| ATOM | 6811 | CA | LEU B 403 | 10.291 | 21.515 | 55.623 | 1.00 | 18.91 | C |
| ATOM | 6813 | CB | LEU B 403 | 11.403 | 20.485 | 55.442 | 1.00 | 18.51 | C |
| ATOM | 6816 | CG | LEU B 403 | 12.064 | 19.983 | 56.718 | 1.00 | 17.83 | C |
| ATOM | 6818 | CD1 | LEU B 403 | 11.007 | 19.509 | 57.721 | 1.00 | 17.29 | C |
| ATOM | 6822 | CD2 | LEU B 403 | 13.053 | 18.855 | 56.391 | 1.00 | 17.18 | C |
| ATOM | 6826 | C | LEU B 403 | 10.864 | 22.799 | 56.222 | 1.00 | 19.30 | C |
| ATOM | 6827 | O | LEU B 403 | 10.836 | 22.962 | 57.445 | 1.00 | 19.32 | O |
| ATOM | 6828 | N | LEU B 404 | 11.349 | 23.710 | 55.385 | 1.00 | 18.83 | N |
| ATOM | 6830 | CA | LEU B 404 | 11.908 | 24.971 | 55.893 | 1.00 | 19.83 | C |
| ATOM | 6832 | CB | LEU B 404 | 12.582 | 25.758 | 54.769 | 1.00 | 19.82 | C |
| ATOM | 6835 | CG | LEU B 404 | 13.162 | 27.133 | 55.082 | 1.00 | 21.43 | C |
| ATOM | 6837 | CD1 | LEU B 404 | 14.160 | 27.114 | 56.223 | 1.00 | 21.67 | C |
| ATOM | 6841 | CD2 | LEU B 404 | 13.827 | 27.664 | 53.830 | 1.00 | 23.49 | C |
| ATOM | 6845 | C | LEU B 404 | 10.814 | 25.826 | 56.544 | 1.00 | 20.14 | C |
| ATOM | 6846 | O | LEU B 404 | 10.966 | 26.280 | 57.675 | 1.00 | 19.85 | O |
| ATOM | 6847 | N | SER B 405 | 9.711 | 26.025 | 55.824 | 1.00 | 20.46 | N |
| ATOM | 6849 | CA | SER B 405 | 8.570 | 26.776 | 56.344 | 1.00 | 21.10 | C |
| ATOM | 6851 | CB | SER B 405 | 7.494 | 26.874 | 55.286 | 1.00 | 20.99 | C |
| ATOM | 6854 | OG | SER B 405 | 7.940 | 27.728 | 54.257 | 1.00 | 22.98 | O |
| ATOM | 6856 | C | SER B 405 | 7.968 | 26.162 | 57.598 | 1.00 | 21.36 | C |
| ATOM | 6857 | O | SER B 405 | 7.627 | 26.881 | 58.513 | 1.00 | 20.94 | O |
| ATOM | 6858 | N | TYR B 406 | 7.848 | 24.832 | 57.629 | 1.00 | 21.51 | N |
| ATOM | 6860 | CA | TYR B 406 | 7.295 | 24.124 | 58.776 | 1.00 | 21.53 | C |
| ATOM | 6862 | CB | TYR B 406 | 7.098 | 22.638 | 58.440 | 1.00 | 22.05 | C |
| ATOM | 6865 | CG | TYR B 406 | 6.431 | 21.844 | 59.542 | 1.00 | 23.67 | C |
| ATOM | 6866 | CD1 | TYR B 406 | 5.043 | 21.693 | 59.585 | 1.00 | 24.99 | C |
| ATOM | 6868 | CE1 | TYR B 406 | 4.432 | 20.986 | 60.609 | 1.00 | 25.66 | C |
| ATOM | 6870 | CZ | TYR B 406 | 5.221 | 20.429 | 61.607 | 1.00 | 26.80 | C |
| ATOM | 6871 | OH | TYR B 406 | 4.665 | 19.720 | 62.646 | 1.00 | 26.38 | O |
| ATOM | 6873 | CE2 | TYR B 406 | 6.597 | 20.568 | 61.566 | 1.00 | 26.07 | C |
| ATOM | 6875 | CD2 | TYR B 406 | 7.187 | 21.268 | 60.546 | 1.00 | 24.46 | C |
| ATOM | 6877 | C | TYR B 406 | 8.160 | 24.280 | 60.035 | 1.00 | 21.46 | C |
| ATOM | 6878 | O | TYR B 406 | 7.628 | 24.611 | 61.082 | 1.00 | 20.76 | O |
| ATOM | 6879 | N | THR B 407 | 9.479 | 24.056 | 59.935 | 1.00 | 22.12 | N |

| ATOM | 6881 | CA | THR | B 407 | 10.380 | 24.170 | 61.104 | 1.00 | 22.52 | C |
|------|------|-----|-----|-------|--------|--------|--------|------|-------|---|
| ATOM | 6883 | CB | THR | B 407 | 11.845 | 23.693 | 60.845 | 1.00 | 22.07 | C |
| ATOM | 6885 | OG1 | THR | B 407 | 12.375 | 24.291 | 59.659 | 1.00 | 21.27 | O |
| ATOM | 6887 | CG2 | THR | B 407 | 11.918 | 22.218 | 60.585 | 1.00 | 21.87 | C |
| ATOM | 6891 | C | THR | B 407 | 10.423 | 25.587 | 61.628 | 1.00 | 23.40 | C |
| ATOM | 6892 | O | THR | B 407 | 10.545 | 25.776 | 62.818 | 1.00 | 23.34 | O |
| ATOM | 6893 | N | ARG | B 408 | 10.318 | 26.566 | 60.730 | 1.00 | 24.83 | N |
| ATOM | 6895 | CA | ARG | B 408 | 10.251 | 27.989 | 61.095 | 1.00 | 26.16 | C |
| ATOM | 6897 | CB | ARG | B 408 | 10.133 | 28.857 | 59.849 | 1.00 | 26.47 | C |
| ATOM | 6900 | CG | ARG | B 408 | 11.422 | 29.169 | 59.213 | 1.00 | 29.07 | C |
| ATOM | 6903 | CD | ARG | B 408 | 11.316 | 30.145 | 58.080 | 1.00 | 33.02 | C |
| ATOM | 6906 | NE | ARG | B 408 | 12.639 | 30.395 | 57.520 | 1.00 | 36.59 | N |
| ATOM | 6908 | CZ | ARG | B 408 | 12.875 | 30.989 | 56.355 | 1.00 | 39.86 | C |
| ATOM | 6909 | NH1 | ARG | B 408 | 11.870 | 31.415 | 55.590 | 1.00 | 40.48 | N |
| ATOM | 6912 | NH2 | ARG | B 408 | 14.138 | 31.162 | 55.955 | 1.00 | 41.20 | N |
| ATOM | 6915 | C | ARG | B 408 | 9.046 | 28.312 | 61.947 | 1.00 | 26.90 | C |
| ATOM | 6916 | O | ARG | B 408 | 9.115 | 29.145 | 62.856 | 1.00 | 26.25 | O |
| ATOM | 6917 | N | ILE | B 409 | 7.925 | 27.687 | 61.596 | 1.00 | 27.89 | N |
| ATOM | 6919 | CA | ILE | B 409 | 6.657 | 27.927 | 62.273 | 1.00 | 28.59 | C |
| ATOM | 6921 | CB | ILE | B 409 | 5.500 | 27.609 | 61.305 | 1.00 | 28.57 | C |
| ATOM | 6923 | CG1 | ILE | B 409 | 5.513 | 28.615 | 60.148 | 1.00 | 27.22 | C |
| ATOM | 6926 | CD1 | ILE | B 409 | 4.730 | 28.171 | 58.934 | 1.00 | 27.40 | C |
| ATOM | 6930 | CG2 | ILE | B 409 | 4.154 | 27.569 | 62.041 | 1.00 | 28.50 | C |
| ATOM | 6934 | C | ILE | B 409 | 6.551 | 27.138 | 63.583 | 1.00 | 29.57 | C |
| ATOM | 6935 | O | ILE | B 409 | 5.997 | 27.639 | 64.549 | 1.00 | 30.01 | O |
| ATOM | 6936 | N | LYS | B 410 | 7.121 | 25.939 | 63.631 | 1.00 | 30.86 | N |
| ATOM | 6938 | CA | LYS | B 410 | 6.988 | 25.066 | 64.797 | 1.00 | 32.21 | C |
| ATOM | 6940 | CB | LYS | B 410 | 7.166 | 23.588 | 64.418 | 1.00 | 32.45 | C |
| ATOM | 6943 | CG | LYS | B 410 | 8.221 | 22.814 | 65.260 | 1.00 | 33.99 | C |
| ATOM | 6946 | CD | LYS | B 410 | 8.114 | 21.286 | 65.125 | 1.00 | 34.20 | C |
| ATOM | 6949 | CE | LYS | B 410 | 8.522 | 20.586 | 66.421 | 1.00 | 35.09 | C |
| ATOM | 6952 | NZ | LYS | B 410 | 8.397 | 19.084 | 66.286 | 1.00 | 36.30 | N |
| ATOM | 6956 | C | LYS | B 410 | 7.941 | 25.437 | 65.930 | 1.00 | 33.27 | C |
| ATOM | 6957 | O | LYS | B 410 | 7.521 | 25.534 | 67.095 | 1.00 | 33.79 | O |
| ATOM | 6958 | N | ARG | B 411 | 9.222 | 25.606 | 65.609 | 1.00 | 34.33 | N |
| ATOM | 6960 | CA | ARG | B 411 | 10.206 | 26.083 | 66.585 | 1.00 | 35.18 | C |
| ATOM | 6962 | CB | ARG | B 411 | 11.248 | 25.004 | 66.924 | 1.00 | 35.80 | C |
| ATOM | 6965 | CG | ARG | B 411 | 10.683 | 23.741 | 67.611 | 1.00 | 38.53 | C |
| ATOM | 6968 | CD | ARG | B 411 | 10.853 | 23.665 | 69.160 | 1.00 | 42.62 | C |
| ATOM | 6971 | NE | ARG | B 411 | 11.101 | 22.280 | 69.612 | 1.00 | 46.02 | N |
| ATOM | 6973 | CZ | ARG | B 411 | 12.300 | 21.662 | 69.621 | 1.00 | 47.66 | C |
| ATOM | 6974 | NH1 | ARG | B 411 | 13.408 | 22.293 | 69.223 | 1.00 | 48.31 | N |
| ATOM | 6977 | NH2 | ARG | B 411 | 12.393 | 20.401 | 70.043 | 1.00 | 48.06 | N |
| ATOM | 6980 | C | ARG | B 411 | 10.872 | 27.325 | 66.019 | 1.00 | 34.97 | C |
| ATOM | 6981 | O | ARG | B 411 | 11.978 | 27.258 | 65.483 | 1.00 | 34.95 | O |
| ATOM | 6982 | N | PRO | B 412 | 10.201 | 28.469 | 66.141 | 1.00 | 35.00 | N |
| ATOM | 6983 | CA | PRO | B 412 | 10.704 | 29.715 | 65.549 | 1.00 | 34.89 | C |
| ATOM | 6985 | CB | PRO | B 412 | 9.532 | 30.689 | 65.734 | 1.00 | 34.62 | C |

| ATOM | 6988 | CG | PRO B 412 | 8.753 | 30.151 | 66.866 | 1.00 | 34.16 | C |
| ATOM | 6991 | CD | PRO B 412 | 8.924 | 28.675 | 66.855 | 1.00 | 34.87 | C |
| ATOM | 6994 | C | PRO B 412 | 11.961 | 30.253 | 66.217 | 1.00 | 35.11 | C |
| ATOM | 6995 | O | PRO B 412 | 12.562 | 31.173 | 65.662 | 1.00 | 35.08 | O |
| ATOM | 6996 | N | GLN B 413 | 12.345 | 29.710 | 67.373 | 1.00 | 35.40 | N |
| ATOM | 6998 | CA | GLN B 413 | 13.527 | 30.198 | 68.087 | 1.00 | 35.71 | C |
| ATOM | 7000 | CB | GLN B 413 | 13.146 | 30.691 | 69.495 | 1.00 | 35.93 | C |
| ATOM | 7003 | CG | GLN B 413 | 12.139 | 31.862 | 69.503 | 1.00 | 36.43 | C |
| ATOM | 7006 | CD | GLN B 413 | 12.742 | 33.189 | 69.037 | 1.00 | 37.27 | C |
| ATOM | 7007 | OE1 | GLN B 413 | 12.480 | 33.649 | 67.918 | 1.00 | 37.13 | O |
| ATOM | 7008 | NE2 | GLN B 413 | 13.538 | 33.812 | 69.901 | 1.00 | 38.43 | N |
| ATOM | 7011 | C | GLN B 413 | 14.677 | 29.183 | 68.151 | 1.00 | 35.33 | C |
| ATOM | 7012 | O | GLN B 413 | 15.675 | 29.438 | 68.820 | 1.00 | 35.84 | O |
| ATOM | 7013 | N | ASP B 414 | 14.544 | 28.049 | 67.461 | 1.00 | 34.73 | N |
| ATOM | 7015 | CA | ASP B 414 | 15.691 | 27.174 | 67.172 | 1.00 | 34.14 | C |
| ATOM | 7017 | CB | ASP B 414 | 15.466 | 25.727 | 67.632 | 1.00 | 34.43 | C |
| ATOM | 7020 | CG | ASP B 414 | 16.752 | 24.886 | 67.574 | 1.00 | 35.47 | C |
| ATOM | 7021 | OD1 | ASP B 414 | 17.799 | 25.376 | 67.085 | 1.00 | 36.59 | O |
| ATOM | 7022 | OD2 | ASP B 414 | 16.822 | 23.727 | 68.025 | 1.00 | 37.73 | O |
| ATOM | 7023 | C | ASP B 414 | 15.953 | 27.165 | 65.689 | 1.00 | 32.85 | C |
| ATOM | 7024 | O | ASP B 414 | 15.444 | 26.313 | 64.973 | 1.00 | 33.10 | O |
| ATOM | 7025 | N | GLN B 415 | 16.767 | 28.096 | 65.230 | 1.00 | 31.49 | N |
| ATOM | 7027 | CA | GLN B 415 | 17.013 | 28.245 | 63.801 | 1.00 | 30.71 | C |
| ATOM | 7029 | CB | GLN B 415 | 17.546 | 29.646 | 63.508 | 1.00 | 31.50 | C |
| ATOM | 7032 | CG | GLN B 415 | 17.044 | 30.228 | 62.193 | 1.00 | 33.44 | C |
| ATOM | 7035 | CD | GLN B 415 | 17.412 | 31.699 | 62.033 | 1.00 | 35.70 | C |
| ATOM | 7036 | OE1 | GLN B 415 | 16.661 | 32.462 | 61.413 | 1.00 | 37.83 | O |
| ATOM | 7037 | NE2 | GLN B 415 | 18.568 | 32.099 | 62.579 | 1.00 | 35.86 | N |
| ATOM | 7040 | C | GLN B 415 | 17.974 | 27.209 | 63.234 | 1.00 | 28.90 | C |
| ATOM | 7041 | O | GLN B 415 | 18.068 | 27.069 | 62.026 | 1.00 | 29.27 | O |
| ATOM | 7042 | N | LEU B 416 | 18.673 | 26.474 | 64.084 | 1.00 | 27.28 | N |
| ATOM | 7044 | CA | LEU B 416 | 19.594 | 25.440 | 63.609 | 1.00 | 26.89 | C |
| ATOM | 7046 | CB | LEU B 416 | 20.804 | 25.382 | 64.523 | 1.00 | 27.08 | C |
| ATOM | 7049 | CG | LEU B 416 | 21.479 | 26.755 | 64.628 | 1.00 | 26.37 | C |
| ATOM | 7051 | CD1 | LEU B 416 | 22.711 | 26.643 | 65.452 | 1.00 | 26.65 | C |
| ATOM | 7055 | CD2 | LEU B 416 | 21.777 | 27.334 | 63.233 | 1.00 | 25.68 | C |
| ATOM | 7059 | C | LEU B 416 | 18.987 | 24.057 | 63.457 | 1.00 | 26.56 | C |
| ATOM | 7060 | O | LEU B 416 | 19.645 | 23.137 | 63.022 | 1.00 | 27.07 | O |
| ATOM | 7061 | N | ARG B 417 | 17.714 | 23.921 | 63.787 | 1.00 | 25.89 | N |
| ATOM | 7063 | CA | ARG B 417 | 16.989 | 22.667 | 63.651 | 1.00 | 25.07 | C |
| ATOM | 7065 | CB | ARG B 417 | 15.575 | 22.910 | 64.168 | 1.00 | 25.96 | C |
| ATOM | 7068 | CG | ARG B 417 | 14.766 | 21.716 | 64.424 | 1.00 | 26.28 | C |
| ATOM | 7071 | CD | ARG B 417 | 13.277 | 22.075 | 64.739 | 1.00 | 29.42 | C |
| ATOM | 7074 | NE | ARG B 417 | 12.437 | 20.881 | 64.733 | 1.00 | 26.91 | N |
| ATOM | 7076 | CZ | ARG B 417 | 12.598 | 19.893 | 65.587 | 1.00 | 28.65 | C |
| ATOM | 7077 | NH1 | ARG B 417 | 13.490 | 19.983 | 66.568 | 1.00 | 28.98 | N |
| ATOM | 7080 | NH2 | ARG B 417 | 11.841 | 18.821 | 65.488 | 1.00 | 30.77 | N |
| ATOM | 7083 | C | ARG B 417 | 16.901 | 22.186 | 62.222 | 1.00 | 23.66 | C |

| ATOM | 7084 | O   | ARG | B 417 | 17.168 | 21.022 | 61.917 | 1.00 | 23.62 | O |
|------|------|-----|-----|-------|--------|--------|--------|------|-------|---|
| ATOM | 7085 | N   | PHE | B 418 | 16.485 | 23.075 | 61.338 | 1.00 | 22.27 | N |
| ATOM | 7087 | CA  | PHE | B 418 | 16.391 | 22.744 | 59.925 | 1.00 | 21.50 | C |
| ATOM | 7089 | CB  | PHE | B 418 | 15.839 | 23.936 | 59.155 | 1.00 | 21.21 | C |
| ATOM | 7092 | CG  | PHE | B 418 | 15.686 | 23.696 | 57.702 | 1.00 | 20.80 | C |
| ATOM | 7093 | CD1 | PHE | B 418 | 14.794 | 22.782 | 57.238 | 1.00 | 21.20 | C |
| ATOM | 7095 | CE1 | PHE | B 418 | 14.651 | 22.553 | 55.888 | 1.00 | 22.26 | C |
| ATOM | 7097 | CZ  | PHE | B 418 | 15.364 | 23.256 | 54.991 | 1.00 | 21.03 | C |
| ATOM | 7099 | CE2 | PHE | B 418 | 16.253 | 24.168 | 55.426 | 1.00 | 25.19 | C |
| ATOM | 7101 | CD2 | PHE | B 418 | 16.416 | 24.399 | 56.792 | 1.00 | 24.41 | C |
| ATOM | 7103 | C   | PHE | B 418 | 17.735 | 22.214 | 59.338 | 1.00 | 21.50 | C |
| ATOM | 7104 | O   | PHE | B 418 | 17.777 | 21.092 | 58.865 | 1.00 | 20.74 | O |
| ATOM | 7105 | N   | PRO | B 419 | 18.829 | 22.985 | 59.385 | 1.00 | 22.15 | N |
| ATOM | 7106 | CA  | PRO | B 419 | 20.128 | 22.466 | 58.932 | 1.00 | 22.23 | C |
| ATOM | 7108 | CB  | PRO | B 419 | 21.079 | 23.640 | 59.163 | 1.00 | 22.29 | C |
| ATOM | 7111 | CG  | PRO | B 419 | 20.393 | 24.554 | 60.075 | 1.00 | 22.23 | C |
| ATOM | 7114 | CD  | PRO | B 419 | 18.937 | 24.383 | 59.853 | 1.00 | 21.84 | C |
| ATOM | 7117 | C   | PRO | B 419 | 20.627 | 21.220 | 59.697 | 1.00 | 22.91 | C |
| ATOM | 7118 | O   | PRO | B 419 | 21.330 | 20.411 | 59.094 | 1.00 | 23.03 | O |
| ATOM | 7119 | N   | ARG | B 420 | 20.300 | 21.073 | 60.977 | 1.00 | 22.72 | N |
| ATOM | 7121 | CA  | ARG | B 420 | 20.613 | 19.845 | 61.697 | 1.00 | 23.79 | C |
| ATOM | 7123 | CB  | ARG | B 420 | 20.217 | 19.957 | 63.165 | 1.00 | 24.37 | C |
| ATOM | 7126 | CG  | ARG | B 420 | 21.273 | 20.495 | 64.065 | 1.00 | 26.49 | C |
| ATOM | 7129 | CD  | ARG | B 420 | 20.780 | 20.749 | 65.509 | 1.00 | 29.34 | C |
| ATOM | 7132 | NE  | ARG | B 420 | 21.635 | 21.741 | 66.163 | 1.00 | 31.75 | N |
| ATOM | 7134 | CZ  | ARG | B 420 | 21.210 | 22.758 | 66.920 | 1.00 | 34.22 | C |
| ATOM | 7135 | NH1 | ARG | B 420 | 19.905 | 22.942 | 67.170 | 1.00 | 35.33 | N |
| ATOM | 7138 | NH2 | ARG | B 420 | 22.105 | 23.606 | 67.434 | 1.00 | 33.74 | N |
| ATOM | 7141 | C   | ARG | B 420 | 19.881 | 18.623 | 61.109 | 1.00 | 23.97 | C |
| ATOM | 7142 | O   | ARG | B 420 | 20.459 | 17.540 | 61.041 | 1.00 | 23.43 | O |
| ATOM | 7143 | N   | MET | B 421 | 18.622 | 18.791 | 60.702 | 1.00 | 24.27 | N |
| ATOM | 7145 | CA  | MET | B 421 | 17.877 | 17.700 | 60.048 | 1.00 | 25.13 | C |
| ATOM | 7147 | CB  | MET | B 421 | 16.444 | 18.107 | 59.705 | 1.00 | 25.14 | C |
| ATOM | 7150 | CG  | MET | B 421 | 15.556 | 18.134 | 60.884 | 1.00 | 26.83 | C |
| ATOM | 7153 | SD  | MET | B 421 | 14.022 | 18.916 | 60.489 | 1.00 | 27.49 | S |
| ATOM | 7154 | CE  | MET | B 421 | 13.280 | 17.711 | 59.650 | 1.00 | 28.40 | C |
| ATOM | 7158 | C   | MET | B 421 | 18.513 | 17.288 | 58.750 | 1.00 | 25.25 | C |
| ATOM | 7159 | O   | MET | B 421 | 18.675 | 16.104 | 58.484 | 1.00 | 25.17 | O |
| ATOM | 7160 | N   | LEU | B 422 | 18.826 | 18.266 | 57.909 | 1.00 | 25.68 | N |
| ATOM | 7162 | CA  | LEU | B 422 | 19.499 | 17.966 | 56.641 | 1.00 | 25.80 | C |
| ATOM | 7164 | CB  | LEU | B 422 | 19.649 | 19.214 | 55.778 | 1.00 | 26.08 | C |
| ATOM | 7167 | CG  | LEU | B 422 | 18.371 | 19.948 | 55.399 | 1.00 | 27.05 | C |
| ATOM | 7169 | CD1 | LEU | B 422 | 18.758 | 21.190 | 54.647 | 1.00 | 27.88 | C |
| ATOM | 7173 | CD2 | LEU | B 422 | 17.481 | 19.094 | 54.564 | 1.00 | 28.81 | C |
| ATOM | 7177 | C   | LEU | B 422 | 20.889 | 17.373 | 56.870 | 1.00 | 24.95 | C |
| ATOM | 7178 | O   | LEU | B 422 | 21.352 | 16.604 | 56.048 | 1.00 | 25.35 | O |
| ATOM | 7179 | N   | MET | B 423 | 21.554 | 17.700 | 57.972 | 1.00 | 23.97 | N |
| ATOM | 7181 | CA  | MET | B 423 | 22.857 | 17.078 | 58.231 | 1.00 | 24.01 | C |

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ATOM   7183  CB  MET B 423    23.519  17.564  59.514  1.00 24.15        C
ATOM   7186  CG  MET B 423    24.207  18.886  59.485  1.00 28.02        C
ATOM   7189  SD  MET B 423    25.144  19.334  58.028  1.00 33.28        S
ATOM   7190  CE  MET B 423    25.917  20.670  58.720  1.00 30.65        C
ATOM   7194  C   MET B 423    22.688  15.578  58.382  1.00 22.60        C
ATOM   7195  O   MET B 423    23.639  14.832  58.146  1.00 21.75        O
ATOM   7196  N   LYS B 424    21.501  15.157  58.837  1.00 21.54        N
ATOM   7198  CA  LYS B 424    21.198  13.751  59.030  1.00 21.12        C
ATOM   7200  CB  LYS B 424    19.915  13.552  59.845  1.00 21.41        C
ATOM   7203  CG  LYS B 424    20.021  14.054  61.302  1.00 22.33        C
ATOM   7206  CD  LYS B 424    21.060  13.262  62.112  1.00 24.54        C
ATOM   7209  CE  LYS B 424    21.305  13.866  63.503  1.00 26.54        C
ATOM   7212  NZ  LYS B 424    22.298  14.993  63.495  1.00 27.45        N
ATOM   7216  C   LYS B 424    21.140  13.023  57.710  1.00 20.91        C
ATOM   7217  O   LYS B 424    21.461  11.842  57.650  1.00 21.03        O
ATOM   7218  N   LEU B 425    20.757  13.717  56.641  1.00 20.67        N
ATOM   7220  CA  LEU B 425    20.877  13.152  55.302  1.00 20.64        C
ATOM   7222  CB  LEU B 425    20.345  14.103  54.247  1.00 20.69        C
ATOM   7225  CG  LEU B 425    18.873  14.438  54.379  1.00 21.19        C
ATOM   7227  CD1 LEU B 425    18.494  15.237  53.200  1.00 21.86        C
ATOM   7231  CD2 LEU B 425    18.054  13.190  54.443  1.00 22.05        C
ATOM   7235  C   LEU B 425    22.320  12.775  54.954  1.00 19.93        C
ATOM   7236  O   LEU B 425    22.560  11.793  54.253  1.00 20.24        O
ATOM   7237  N   VAL B 426    23.252  13.576  55.444  1.00 18.93        N
ATOM   7239  CA  VAL B 426    24.673  13.325  55.277  1.00 18.53        C
ATOM   7241  CB  VAL B 426    25.562  14.481  55.830  1.00 18.13        C
ATOM   7243  CG1 VAL B 426    26.999  14.281  55.417  1.00 18.12        C
ATOM   7247  CG2 VAL B 426    25.088  15.835  55.310  1.00 18.79        C
ATOM   7251  C   VAL B 426    25.066  12.056  55.990  1.00 19.07        C
ATOM   7252  O   VAL B 426    25.722  11.216  55.391  1.00 19.50        O
ATOM   7253  N   SER B 427    24.707  11.934  57.275  1.00 18.98        N
ATOM   7255  CA  SER B 427    25.032  10.747  58.062  1.00 18.73        C
ATOM   7257  CB  SER B 427    24.455  10.833  59.463  1.00 18.64        C
ATOM   7260  OG  SER B 427    25.035  11.881  60.182  1.00 19.10        O
ATOM   7262  C   SER B 427    24.495   9.495  57.412  1.00 18.86        C
ATOM   7263  O   SER B 427    25.180   8.487  57.394  1.00 18.35        O
ATOM   7264  N   LEU B 428    23.283   9.573  56.843  1.00 19.64        N
ATOM   7266  CA  LEU B 428    22.650   8.419  56.207  1.00 19.88        C
ATOM   7268  CB  LEU B 428    21.240   8.758  55.753  1.00 20.39        C
ATOM   7271  CG  LEU B 428    20.127   8.747  56.783  1.00 22.09        C
ATOM   7273  CD1 LEU B 428    18.833   9.315  56.137  1.00 24.36        C
ATOM   7277  CD2 LEU B 428    19.876   7.349  57.324  1.00 22.79        C
ATOM   7281  C   LEU B 428    23.433   7.870  55.018  1.00 20.62        C
ATOM   7282  O   LEU B 428    23.358   6.662  54.739  1.00 21.52        O
ATOM   7283  N   ARG B 429    24.149   8.726  54.293  1.00 21.02        N
ATOM   7285  CA  ARG B 429    25.036   8.240  53.239  1.00 21.84        C
ATOM   7287  CB  ARG B 429   .25.705   9.366  52.453  1.00 21.88        C
ATOM   7290  CG  ARG B 429    24.825  10.054  51.493  1.00 22.26        C
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| ATOM | 7293 | CD | ARG B 429 | 23.955 | 9.170 | 50.625 | 1.00 | 21.65 | C |
| ATOM | 7296 | NE | ARG B 429 | 22.978 | 10.041 | 50.001 | 1.00 | 22.80 | N |
| ATOM | 7298 | CZ | ARG B 429 | 23.105 | 10.605 | 48.806 | 1.00 | 22.52 | C |
| ATOM | 7299 | NH1 | ARG B 429 | 24.158 | 10.373 | 48.037 | 1.00 | 21.19 | N |
| ATOM | 7302 | NH2 | ARG B 429 | 22.125 | 11.385 | 48.368 | 1.00 | 24.13 | N |
| ATOM | 7305 | C | ARG B 429 | 26.138 | 7.361 | 53.752 | 1.00 | 22.42 | C |
| ATOM | 7306 | O | ARG B 429 | 26.450 | 6.343 | 53.134 | 1.00 | 23.64 | O |
| ATOM | 7307 | N | THR B 430 | 26.775 | 7.773 | 54.838 | 1.00 | 22.80 | N |
| ATOM | 7309 | CA | THR B 430 | 27.779 | 6.922 | 55.448 | 1.00 | 22.74 | C |
| ATOM | 7311 | CB | THR B 430 | 28.429 | 7.629 | 56.631 | 1.00 | 22.93 | C |
| ATOM | 7313 | OG1 | THR B 430 | 29.214 | 8.722 | 56.144 | 1.00 | 24.58 | O |
| ATOM | 7315 | CG2 | THR B 430 | 29.448 | 6.722 | 57.336 | 1.00 | 22.39 | C |
| ATOM | 7319 | C | THR B 430 | 27.162 | 5.592 | 55.887 | 1.00 | 22.46 | C |
| ATOM | 7320 | O | THR B 430 | 27.729 | 4.542 | 55.636 | 1.00 | 22.37 | O |
| ATOM | 7321 | N | LEU B 431 | 26.001 | 5.634 | 56.526 | 1.00 | 22.38 | N |
| ATOM | 7323 | CA | LEU B 431 | 25.383 | 4.409 | 57.051 | 1.00 | 22.53 | C |
| ATOM | 7325 | CB | LEU B 431 | 24.150 | 4.717 | 57.888 | 1.00 | 21.83 | C |
| ATOM | 7328 | CG | LEU B 431 | 24.478 | 5.445 | 59.184 | 1.00 | 20.87 | C |
| ATOM | 7330 | CD1 | LEU B 431 | 23.188 | 5.951 | 59.823 | 1.00 | 20.96 | C |
| ATOM | 7334 | CD2 | LEU B 431 | 25.211 | 4.523 | 60.138 | 1.00 | 20.97 | C |
| ATOM | 7338 | C | LEU B 431 | 25.030 | 3.458 | 55.918 | 1.00 | 22.90 | C |
| ATOM | 7339 | O | LEU B 431 | 25.170 | 2.238 | 56.052 | 1.00 | 23.02 | O |
| ATOM | 7340 | N | SER B 432 | 24.601 | 4.014 | 54.799 | 1.00 | 22.59 | N |
| ATOM | 7342 | CA | SER B 432 | 24.342 | 3.202 | 53.637 | 1.00 | 23.31 | C |
| ATOM | 7344 | CB | SER B 432 | 23.836 | 4.059 | 52.479 | 1.00 | 23.62 | C |
| ATOM | 7347 | OG | SER B 432 | 24.046 | 3.351 | 51.281 | 1.00 | 25.54 | O |
| ATOM | 7349 | C | SER B 432 | 25.596 | 2.445 | 53.206 | 1.00 | 23.40 | C |
| ATOM | 7350 | O | SER B 432 | 25.529 | 1.299 | 52.808 | 1.00 | 23.35 | O |
| ATOM | 7351 | N | SER B 433 | 26.745 | 3.092 | 53.283 | 1.00 | 24.11 | N |
| ATOM | 7353 | CA | SER B 433 | 28.005 | 2.432 | 53.004 | 1.00 | 24.80 | C |
| ATOM | 7355 | CB | SER B 433 | 29.157 | 3.419 | 53.086 | 1.00 | 25.19 | C |
| ATOM | 7358 | OG | SER B 433 | 29.734 | 3.573 | 51.807 | 1.00 | 30.38 | O |
| ATOM | 7360 | C | SER B 433 | 28.289 | 1.311 | 53.971 | 1.00 | 24.29 | C |
| ATOM | 7361 | O | SER B 433 | 28.771 | 0.251 | 53.562 | 1.00 | 24.73 | O |
| ATOM | 7362 | N | VAL B 434 | 28.030 | 1.565 | 55.252 | 1.00 | 24.19 | N |
| ATOM | 7364 | CA | VAL B 434 | 28.243 | 0.579 | 56.319 | 1.00 | 24.22 | C |
| ATOM | 7366 | CB | VAL B 434 | 27.876 | 1.124 | 57.734 | 1.00 | 24.01 | C |
| ATOM | 7368 | CG1 | VAL B 434 | 27.914 | 0.029 | 58.754 | 1.00 | 24.53 | C |
| ATOM | 7372 | CG2 | VAL B 434 | 28.826 | 2.247 | 58.154 | 1.00 | 24.55 | C |
| ATOM | 7376 | C | VAL B 434 | 27.386 | -0.643 | 56.006 | 1.00 | 24.42 | C |
| ATOM | 7377 | O | VAL B 434 | 27.858 | -1.780 | 56.135 | 1.00 | 23.89 | O |
| ATOM | 7378 | N | HIS B 435 | 26.161 | -0.393 | 55.529 | 1.00 | 24.53 | N |
| ATOM | 7380 | CA | HIS B 435 | 25.210 | -1.450 | 55.212 | 1.00 | 24.98 | C |
| ATOM | 7382 | CB | HIS B 435 | 23.836 | -0.877 | 54.873 | 1.00 | 25.01 | C |
| ATOM | 7385 | CG | HIS B 435 | 22.912 | -1.859 | 54.231 | 1.00 | 24.61 | C |
| ATOM | 7386 | ND1 | HIS B 435 | 22.618 | -1.826 | 52.882 | 1.00 | 26.95 | N |
| ATOM | 7388 | CE1 | HIS B 435 | 21.787 | -2.814 | 52.596 | 1.00 | 26.68 | C |
| ATOM | 7390 | NE2 | HIS B 435 | 21.526 | -3.480 | 53.709 | 1.00 | 23.70 | N |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 7392 | CD2 | HIS | B | 435 | 22.216 | -2.900 | 54.745 | 1.00 | 24.26 | C |
| ATOM | 7394 | C | HIS | B | 435 | 25.714 | -2.323 | 54.074 | 1.00 | 25.66 | C |
| ATOM | 7395 | O | HIS | B | 435 | 25.574 | -3.530 | 54.163 | 1.00 | 25.03 | O |
| ATOM | 7396 | N | SER | B | 436 | 26.304 | -1.710 | 53.035 | 1.00 | 26.47 | N |
| ATOM | 7398 | CA | SER | B | 436 | 26.938 | -2.445 | 51.933 | 1.00 | 27.56 | C |
| ATOM | 7400 | CB | SER | B | 436 | 27.575 | -1.499 | 50.901 | 1.00 | 27.74 | C |
| ATOM | 7403 | OG | SER | B | 436 | 26.626 | -1.109 | 49.928 | 1.00 | 32.60 | O |
| ATOM | 7405 | C | SER | B | 436 | 28.025 | -3.393 | 52.409 | 1.00 | 27.41 | C |
| ATOM | 7406 | O | SER | B | 436 | 28.130 | -4.493 | 51.882 | 1.00 | 27.40 | O |
| ATOM | 7407 | N | GLU | B | 437 | 28.848 | -2.949 | 53.364 | 1.00 | 27.71 | N |
| ATOM | 7409 | CA | GLU | B | 437 | 29.889 | -3.803 | 53.969 | 1.00 | 28.28 | C |
| ATOM | 7411 | CB | GLU | B | 437 | 30.805 | -2.974 | 54.858 | 1.00 | 28.54 | C |
| ATOM | 7414 | CG | GLU | B | 437 | 31.727 | -2.061 | 54.072 | 1.00 | 32.01 | C |
| ATOM | 7417 | CD | GLU | B | 437 | 32.166 | -0.823 | 54.844 | 1.00 | 35.77 | C |
| ATOM | 7418 | OE1 | GLU | B | 437 | 32.705 | 0.098 | 54.190 | 1.00 | 39.57 | O |
| ATOM | 7419 | OE2 | GLU | B | 437 | 31.993 | -0.764 | 56.092 | 1.00 | 38.27 | O |
| ATOM | 7420 | C | GLU | B | 437 | 29.317 | -4.962 | 54.804 | 1.00 | 27.86 | C |
| ATOM | 7421 | O | GLU | B | 437 | 29.912 | -6.042 | 54.876 | 1.00 | 27.25 | O |
| ATOM | 7422 | N | GLN | B | 438 | 28.171 | -4.726 | 55.439 | 1.00 | 27.48 | N |
| ATOM | 7424 | CA | GLN | B | 438 | 27.514 | -5.770 | 56.196 | 1.00 | 27.48 | C |
| ATOM | 7426 | CB | GLN | B | 438 | 26.391 | -5.220 | 57.085 | 1.00 | 27.08 | C |
| ATOM | 7429 | CG | GLN | B | 438 | 25.479 | -6.296 | 57.699 | 1.00 | 26.95 | C |
| ATOM | 7432 | CD | GLN | B | 438 | 26.181 | -7.186 | 58.720 | 1.00 | 27.28 | C |
| ATOM | 7433 | OE1 | GLN | B | 438 | 26.237 | -6.854 | 59.897 | 1.00 | 28.65 | O |
| ATOM | 7434 | NE2 | GLN | B | 438 | 26.701 | -8.314 | 58.274 | 1.00 | 26.37 | N |
| ATOM | 7437 | C | GLN | B | 438 | 27.010 | -6.821 | 55.197 | 1.00 | 27.52 | C |
| ATOM | 7438 | O | GLN | B | 438 | 27.304 | -8.001 | 55.372 | 1.00 | 26.72 | O |
| ATOM | 7439 | N | VAL | B | 439 | 26.320 | -6.403 | 54.131 | 1.00 | 27.61 | N |
| ATOM | 7441 | CA | VAL | B | 439 | 25.830 | -7.393 | 53.170 | 1.00 | 28.43 | C |
| ATOM | 7443 | CB | VAL | B | 439 | 24.717 | -6.897 | 52.113 | 1.00 | 28.35 | C |
| ATOM | 7445 | CG1 | VAL | B | 439 | 24.044 | -5.589 | 52.495 | 1.00 | 27.55 | C |
| ATOM | 7449 | CG2 | VAL | B | 439 | 25.229 | -6.905 | 50.676 | 1.00 | 28.07 | C |
| ATOM | 7453 | C | VAL | B | 439 | 27.004 | -8.103 | 52.487 | 1.00 | 28.78 | C |
| ATOM | 7454 | O | VAL | B | 439 | 26.901 | -9.259 | 52.125 | 1.00 | 28.52 | O |
| ATOM | 7455 | N | PHE | B | 440 | 28.125 | -7.410 | 52.360 | 1.00 | 29.47 | N |
| ATOM | 7457 | CA | PHE | B | 440 | 29.305 | -7.982 | 51.740 | 1.00 | 30.18 | C |
| ATOM | 7459 | CB | PHE | B | 440 | 30.318 | -6.877 | 51.390 | 1.00 | 30.52 | C |
| ATOM | 7462 | CG | PHE | B | 440 | 31.606 | -7.398 | 50.836 | 1.00 | 31.17 | C |
| ATOM | 7463 | CD1 | PHE | B | 440 | 31.791 | -7.513 | 49.466 | 1.00 | 31.37 | C |
| ATOM | 7465 | CE1 | PHE | B | 440 | 32.979 | -8.019 | 48.956 | 1.00 | 31.90 | C |
| ATOM | 7467 | CZ | PHE | B | 440 | 33.998 | -8.423 | 49.821 | 1.00 | 32.17 | C |
| ATOM | 7469 | CE2 | PHE | B | 440 | 33.824 | -8.319 | 51.191 | 1.00 | 32.21 | C |
| ATOM | 7471 | CD2 | PHE | B | 440 | 32.632 | -7.803 | 51.696 | 1.00 | 31.85 | C |
| ATOM | 7473 | C | PHE | B | 440 | 29.913 | -9.048 | 52.662 | 1.00 | 30.53 | C |
| ATOM | 7474 | O | PHE | B | 440 | 30.343 | -10.100 | 52.195 | 1.00 | 30.16 | O |
| ATOM | 7475 | N | ALA | B | 441 | 29.925 | -8.772 | 53.968 | 1.00 | 31.12 | N |
| ATOM | 7477 | CA | ALA | B | 441 | 30.325 | -9.745 | 54.974 | 1.00 | 31.30 | C |
| ATOM | 7479 | CB | ALA | B | 441 | 30.379 | -9.105 | 56.343 | 1.00 | 31.11 | C |

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ATOM 7483 C   ALA B 441    29.391 -10.955 54.995 1.00 32.14    C
ATOM 7484 O   ALA B 441    29.800 -12.049 55.385 1.00 32.55    O
ATOM 7485 N   LEU B 442    28.142 -10.771 54.589 1.00 33.22    N
ATOM 7487 CA  LEU B 442    27.205 -11.892 54.477 1.00 34.11    C
ATOM 7489 CB  LEU B 442    25.758 -11.389 54.314 1.00 33.91    C
ATOM 7492 CG  LEU B 442    25.202 -10.628 55.521 1.00 33.90    C
ATOM 7494 CD1 LEU B 442    23.829 -10.068 55.218 1.00 34.88    C
ATOM 7498 CD2 LEU B 442    25.123 -11.505 56.737 1.00 34.60    C
ATOM 7502 C   LEU B 442    27.593 -12.841 53.332 1.00 34.73    C
ATOM 7503 O   LEU B 442    27.529 -14.056 53.490 1.00 34.28    O
ATOM 7504 N   ARG B 443    28.002 -12.274 52.198 1.00 35.79    N
ATOM 7506 CA  ARG B 443    28.464 -13.057 51.053 1.00 36.82    C
ATOM 7508 CB  ARG B 443    28.733 -12.121 49.852 1.00 37.27    C
ATOM 7511 CG  ARG B 443    29.850 -12.552 48.893 1.00 39.03    C
ATOM 7514 CD  ARG B 443    29.495 -12.486 47.393 1.00 41.01    C
ATOM 7517 NE  ARG B 443    30.402 -13.339 46.604 1.00 43.02    N
ATOM 7519 CZ  ARG B 443    30.348 -13.500 45.277 1.00 43.98    C
ATOM 7520 NH1 ARG B 443    29.428 -12.865 44.544 1.00 44.15    N
ATOM 7523 NH2 ARG B 443    31.225 -14.303 44.677 1.00 44.00    N
ATOM 7526 C   ARG B 443    29.694 -13.903 51.446 1.00 37.30    C
ATOM 7527 O   ARG B 443    29.792 -15.085 51.073 1.00 37.31    O
ATOM 7528 N   LEU B 444    30.601 -13.314 52.229 1.00 37.79    N
ATOM 7530 CA  LEU B 444    31.804 -14.014 52.703 1.00 38.36    C
ATOM 7532 CB  LEU B 444    32.823 -13.031 53.309 1.00 38.50    C
ATOM 7535 CG  LEU B 444    33.483 -11.946 52.437 1.00 39.27    C
ATOM 7537 CD1 LEU B 444    34.650 -11.301 53.198 1.00 39.42    C
ATOM 7541 CD2 LEU B 444    33.967 -12.493 51.093 1.00 39.49    C
ATOM 7545 C   LEU B 444    31.501 -15.092 53.743 1.00 38.57    C
ATOM 7546 O   LEU B 444    32.320 -15.972 53.946 1.00 38.77    O
ATOM 7547 N   GLN B 445    30.351 -15.001 54.417 1.00 39.03    N
ATOM 7549 CA  GLN B 445    29.935 -15.990 55.421 1.00 39.48    C
ATOM 7551 CB  GLN B 445    29.267 -15.317 56.630 1.00 39.67    C
ATOM 7554 CG  GLN B 445    30.160 -14.414 57.476 1.00 40.48    C
ATOM 7557 CD  GLN B 445    29.374 -13.280 58.152 1.00 41.27    C
ATOM 7558 OE1 GLN B 445    28.303 -13.508 58.721 1.00 41.73    O
ATOM 7559 NE2 GLN B 445    29.904 -12.062 58.079 1.00 41.86    N
ATOM 7562 C   GLN B 445    28.958 -17.022 54.846 1.00 39.62    C
ATOM 7563 O   GLN B 445    28.558 -17.953 55.549 1.00 39.83    O
ATOM 7564 N   ASP B 446    28.570 -16.856 53.583 1.00 39.69    N
ATOM 7566 CA  ASP B 446    27.636 -17.775 52.926 1.00 39.90    C
ATOM 7568 CB  ASP B 446    28.171 -19.220 52.986 1.00 40.14    C
ATOM 7571 CG  ASP B 446    27.722 -20.064 51.805 1.00 40.55    C
ATOM 7572 OD1 ASP B 446    27.232 -19.486 50.812 1.00 40.10    O
ATOM 7573 OD2 ASP B 446    27.836 -21.315 51.786 1.00 41.94    O
ATOM 7574 C   ASP B 446    26.218 -17.699 53.518 1.00 39.64    C
ATOM 7575 O   ASP B 446    25.485 -18.697 53.549 1.00 39.62    O
ATOM 7576 N   LYS B 447    25.855 -16.507 53.985 1.00 39.29    N
ATOM 7578 CA  LYS B 447    24.502 -16.198 54.428 1.00 38.85    C
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ATOM   7580 CB  LYS B 447    24.538 -15.369 55.721 1.00 38.99        C
ATOM   7583 CG  LYS B 447    25.541 -15.927 56.749 1.00 39.99        C
ATOM   7586 CD  LYS B 447    25.296 -15.482 58.201 1.00 40.92        C
ATOM   7589 CE  LYS B 447    26.096 -16.391 59.168 1.00 41.86        C
ATOM   7592 NZ  LYS B 447    26.346 -15.812 60.527 1.00 42.16        N
ATOM   7596 C   LYS B 447    23.842 -15.440 53.284 1.00 38.09        C
ATOM   7597 O   LYS B 447    24.282 -14.348 52.921 1.00 38.31        O
ATOM   7598 N   LYS B 448    22.822 -16.044 52.679 1.00 37.06        N
ATOM   7600 CA  LYS B 448    22.124 -15.429 51.555 1.00 36.00        C
ATOM   7602 CB  LYS B 448    21.698 -16.482 50.523 1.00 36.12        C
ATOM   7605 CG  LYS B 448    22.856 -17.241 49.867 1.00 36.81        C
ATOM   7608 CD  LYS B 448    23.688 -16.366 48.905 1.00 37.64        C
ATOM   7611 CE  LYS B 448    25.091 -16.967 48.656 1.00 38.58        C
ATOM   7614 NZ  LYS B 448    26.200 -16.218 49.345 1.00 38.48        N
ATOM   7618 C   LYS B 448    20.912 -14.660 52.071 1.00 34.89        C
ATOM   7619 O   LYS B 448    20.300 -15.040 53.082 1.00 34.58        O
ATOM   7620 N   LEU B 449    20.601 -13.560 51.386 1.00 33.41        N
ATOM   7622 CA  LEU B 449    19.396 -12.786 51.648 1.00 32.25        C
ATOM   7624 CB  LEU B 449    19.590 -11.327 51.260 1.00 31.84        C
ATOM   7627 CG  LEU B 449    20.615 -10.552 52.087 1.00 30.08        C
ATOM   7629 CD1 LEU B 449    20.834  -9.203 51.465 1.00 29.32        C
ATOM   7633 CD2 LEU B 449    20.156 -10.419 53.526 1.00 28.15        C
ATOM   7637 C   LEU B 449    18.224 -13.360 50.868 1.00 31.93        C
ATOM   7638 O   LEU B 449    18.415 -14.044 49.860 1.00 31.97        O
ATOM   7639 N   PRO B 450    17.010 -13.083 51.324 1.00 31.45        N
ATOM   7640 CA  PRO B 450    15.819 -13.504 50.585 1.00 31.01        C
ATOM   7642 CB  PRO B 450    14.675 -13.158 51.544 1.00 31.37        C
ATOM   7645 CG  PRO B 450    15.335 -12.895 52.857 1.00 31.77        C
ATOM   7648 CD  PRO B 450    16.661 -12.322 52.536 1.00 31.42        C
ATOM   7651 C   PRO B 450    15.687 -12.698 49.279 1.00 30.32        C
ATOM   7652 O   PRO B 450    16.112 -11.544 49.270 1.00 29.65        O
ATOM   7653 N   PRO B 451    15.109 -13.295 48.232 1.00 29.63        N
ATOM   7654 CA  PRO B 451    14.930 -12.658 46.920 1.00 29.20        C
ATOM   7656 CB  PRO B 451    13.801 -13.496 46.298 1.00 29.78        C
ATOM   7659 CG  PRO B 451    14.086 -14.923 46.803 1.00 29.58        C
ATOM   7662 CD  PRO B 451    14.618 -14.696 48.221 1.00 30.20        C
ATOM   7665 C   PRO B 451    14.589 -11.154 46.846 1.00 28.57        C
ATOM   7666 O   PRO B 451    15.275 -10.462 46.118 1.00 28.26        O
ATOM   7667 N   LEU B 452    13.589 -10.650 47.552 1.00 27.85        N
ATOM   7669 CA  LEU B 452    13.300  -9.222 47.473 1.00 27.84        C
ATOM   7671 CB  LEU B 452    12.015  -8.872 48.232 1.00 27.62        C
ATOM   7674 CG  LEU B 452    11.493  -7.431 48.108 1.00 28.13        C
ATOM   7676 CD1 LEU B 452    10.753  -7.168 46.780 1.00 28.76        C
ATOM   7680 CD2 LEU B 452    10.575  -7.090 49.262 1.00 28.05        C
ATOM   7684 C   LEU B 452    14.489  -8.373 47.979 1.00 27.83        C
ATOM   7685 O   LEU B 452    14.794  -7.336 47.399 1.00 27.31        O
ATOM   7686 N   LEU B 453    15.151  -8.816 49.054 1.00 27.69        N
ATOM   7688 CA  LEU B 453    16.289  -8.075 49.602 1.00 27.42        C
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ATOM  7690 CB  LEU B 453    16.611 -8.523 51.042 1.00 27.10        C
ATOM  7693 CG  LEU B 453    15.447 -8.370 52.046 1.00 26.10        C
ATOM  7695 CD1 LEU B 453    15.928 -8.521 53.480 1.00 25.11        C
ATOM  7699 CD2 LEU B 453    14.705 -7.058 51.868 1.00 26.13        C
ATOM  7703 C   LEU B 453    17.512 -8.215 48.710 1.00 27.66        C
ATOM  7704 O   LEU B 453    18.213 -7.252 48.457 1.00 26.54        O
ATOM  7705 N   SER B 454    17.750 -9.423 48.230 1.00 28.50        N
ATOM  7707 CA  SER B 454    18.856 -9.680 47.317 1.00 29.60        C
ATOM  7709 CB  SER B 454    18.898 -11.151 46.927 1.00 29.24       C
ATOM  7712 OG  SER B 454    20.228 -11.551 46.868 1.00 28.29       O
ATOM  7714 C   SER B 454    18.756 -8.833 46.058 1.00 30.98        C
ATOM  7715 O   SER B 454    19.738 -8.280 45.598 1.00 30.30        O
ATOM  7716 N   GLU B 455    17.546 -8.740 45.531 1.00 33.26        N
ATOM  7718 CA  GLU B 455    17.220 -7.905 44.371 1.00 35.66        C
ATOM  7720 CB  GLU B 455    15.707 -8.032 44.086 1.00 36.15        C
ATOM  7723 CG  GLU B 455    15.263 -7.623 42.691 1.00 39.50        C
ATOM  7726 CD  GLU B 455    13.842 -7.056 42.656 1.00 43.95        C
ATOM  7727 OE1 GLU B 455    13.642 -6.051 41.923 1.00 46.30        O
ATOM  7728 OE2 GLU B 455    12.926 -7.600 43.346 1.00 45.31        O
ATOM  7729 C   GLU B 455    17.628 -6.399 44.504 1.00 36.35        C
ATOM  7730 O   GLU B 455    18.015 -5.782 43.514 1.00 36.57        O
ATOM  7731 N   ILE B 456    17.547 -5.820 45.705 1.00 37.41        N
ATOM  7733 CA  ILE B 456    17.870 -4.396 45.900 1.00 38.54        C
ATOM  7735 CB  ILE B 456    16.995 -3.754 46.989 1.00 39.45        C
ATOM  7737 CG1 ILE B 456    15.584 -4.278 46.966 1.00 41.19        C
ATOM  7740 CD1 ILE B 456    15.094 -4.432 48.349 1.00 43.54        C
ATOM  7744 CG2 ILE B 456    16.922 -2.233 46.842 1.00 40.69        C
ATOM  7748 C   ILE B 456    19.306 -4.145 46.321 1.00 38.55        C
ATOM  7749 O   ILE B 456    19.827 -3.078 46.049 1.00 39.13        O
ATOM  7750 N   TRP B 457    19.935 -5.098 46.997 1.00 38.56        N
ATOM  7752 CA  TRP B 457    21.187 -4.827 47.695 1.00 39.22        C
ATOM  7754 CB  TRP B 457    20.997 -5.016 49.196 1.00 38.75        C
ATOM  7757 CG  TRP B 457    20.060 -4.069 49.811 1.00 36.02        C
ATOM  7758 CD1 TRP B 457    19.845 -2.783 49.455 1.00 35.13        C
ATOM  7760 NE1 TRP B 457    18.894 -2.219 50.269 1.00 34.94        N
ATOM  7762 CE2 TRP B 457    18.508 -3.144 51.196 1.00 33.63        C
ATOM  7763 CD2 TRP B 457    19.225 -4.322 50.932 1.00 34.53        C
ATOM  7764 CE3 TRP B 457    18.996 -5.444 51.744 1.00 35.16        C
ATOM  7766 CZ3 TRP B 457    18.079 -5.348 52.766 1.00 35.33        C
ATOM  7768 CH2 TRP B 457    17.378 -4.158 52.992 1.00 35.72        C
ATOM  7770 CZ2 TRP B 457    17.584 -3.046 52.220 1.00 34.02        C
ATOM  7772 C   TRP B 457    22.403 -5.652 47.286 1.00 40.58        C
ATOM  7773 O   TRP B 457    23.519 -5.234 47.550 1.00 40.81        O
ATOM  7774 N   ASP B 458    22.205 -6.829 46.703 1.00 42.46        N
ATOM  7776 CA  ASP B 458    23.335 -7.641 46.243 1.00 43.79        C
ATOM  7778 CB  ASP B 458    23.021 -9.140 46.277 1.00 43.86        C
ATOM  7781 CG  ASP B 458    23.067 -9.696 47.687 1.00 43.70        C
ATOM  7782 OD1 ASP B 458    24.152 -10.079 48.149 1.00 43.49       O
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| ATOM | 7783 | OD2 | ASP | B | 458 | 22.071 | -9.748 | 48.421 | 1.00 | 43.98 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|----|
| ATOM | 7784 | C | ASP | B | 458 | 23.770 | -7.230 | 44.850 | 1.00 | 45.14 | C |
| ATOM | 7785 | O | ASP | B | 458 | 22.939 | -6.973 | 43.968 | 1.00 | 44.86 | O |
| ATOM | 7786 | N | VAL | B | 459 | 25.087 | -7.166 | 44.671 | 1.00 | 46.62 | N |
| ATOM | 7788 | CA | VAL | B | 459 | 25.677 | -6.828 | 43.382 | 1.00 | 47.79 | C |
| ATOM | 7790 | CB | VAL | B | 459 | 27.184 | -6.477 | 43.539 | 1.00 | 48.10 | C |
| ATOM | 7792 | CG1 | VAL | B | 459 | 27.761 | -5.902 | 42.224 | 1.00 | 48.81 | C |
| ATOM | 7796 | CG2 | VAL | B | 459 | 27.396 | -5.495 | 44.724 | 1.00 | 48.27 | C |
| ATOM | 7800 | C | VAL | B | 459 | 25.448 | -8.016 | 42.420 | 1.00 | 48.37 | C |
| ATOM | 7801 | O | VAL | B | 459 | 24.879 | -7.851 | 41.330 | 1.00 | 48.63 | O |
| ATOM | 7802 | N | ALA | B | 460 | 25.866 | -9.208 | 42.851 | 1.00 | 48.86 | N |
| ATOM | 7804 | CA | ALA | B | 460 | 25.615 | -10.453 | 42.120 | 1.00 | 49.35 | C |
| ATOM | 7806 | CB | ALA | B | 460 | 24.120 | -10.826 | 42.193 | 1.00 | 49.37 | C |
| ATOM | 7810 | C | ALA | B | 460 | 26.087 | -10.381 | 40.660 | 1.00 | 49.70 | C |
| ATOM | 7811 | O | ALA | B | 460 | 27.291 | -10.328 | 40.385 | 1.00 | 49.95 | O |
| ATOM | 7812 | O37 | GW3 | B | 500 | 8.754 | -1.467 | 61.961 | 1.00 | 21.14 | O |
| ATOM | 7813 | C35 | GW3 | B | 500 | 8.030 | -1.164 | 60.974 | 1.00 | 21.33 | C |
| ATOM | 7814 | O36 | GW3 | B | 500 | 6.816 | -0.832 | 61.085 | 1.00 | 21.69 | O |
| ATOM | 7815 | C34 | GW3 | B | 500 | 8.501 | -1.270 | 59.540 | 1.00 | 19.45 | C |
| ATOM | 7818 | C32 | GW3 | B | 500 | 10.000 | -1.306 | 59.568 | 1.00 | 21.09 | C |
| ATOM | 7819 | C33 | GW3 | B | 500 | 10.693 | -2.503 | 59.749 | 1.00 | 22.33 | C |
| ATOM | 7821 | C31 | GW3 | B | 500 | 10.702 | -0.108 | 59.501 | 1.00 | 20.76 | C |
| ATOM | 7823 | C30 | GW3 | B | 500 | 12.080 | -0.101 | 59.610 | 1.00 | 21.26 | C |
| ATOM | 7825 | C29 | GW3 | B | 500 | 12.780 | -1.289 | 59.769 | 1.00 | 20.92 | C |
| ATOM | 7827 | C28 | GW3 | B | 500 | 12.082 | -2.495 | 59.849 | 1.00 | 21.78 | C |
| ATOM | 7828 | O27 | GW3 | B | 500 | 12.727 | -3.692 | 60.010 | 1.00 | 21.31 | O |
| ATOM | 7829 | C26 | GW3 | B | 500 | 14.141 | -3.775 | 60.164 | 1.00 | 20.96 | C |
| ATOM | 7832 | C25 | GW3 | B | 500 | 14.455 | -5.133 | 60.776 | 1.00 | 21.14 | C |
| ATOM | 7835 | C17 | GW3 | B | 500 | 15.789 | -5.126 | 61.531 | 1.00 | 22.57 | C |
| ATOM | 7838 | N09 | GW3 | B | 500 | 16.988 | -5.079 | 60.713 | 1.00 | 22.62 | N |
| ATOM | 7839 | C16 | GW3 | B | 500 | 17.042 | -5.980 | 59.567 | 1.00 | 28.24 | C |
| ATOM | 7842 | C18 | GW3 | B | 500 | 17.898 | -5.643 | 58.368 | 1.00 | 34.17 | C |
| ATOM | 7843 | C19 | GW3 | B | 500 | 18.894 | -6.616 | 57.880 | 1.00 | 40.22 | C |
| ATOM | 7844 | CL4 | GW3 | B | 500 | 19.150 | -8.190 | 58.729 | 1.00 | 52.37 | CL |
| ATOM | 7845 | C23 | GW3 | B | 500 | 17.728 | -4.467 | 57.648 | 1.00 | 37.09 | C |
| ATOM | 7847 | C22 | GW3 | B | 500 | 18.495 | -4.181 | 56.512 | 1.00 | 37.81 | C |
| ATOM | 7849 | C21 | GW3 | B | 500 | 19.460 | -5.057 | 56.039 | 1.00 | 38.98 | C |
| ATOM | 7851 | C20 | GW3 | B | 500 | 19.688 | -6.273 | 56.678 | 1.00 | 41.52 | C |
| ATOM | 7852 | C39 | GW3 | B | 500 | 20.729 | -7.242 | 56.180 | 1.00 | 43.09 | C |
| ATOM | 7853 | F41 | GW3 | B | 500 | 21.793 | -7.133 | 56.983 | 1.00 | 43.65 | F |
| ATOM | 7854 | F40 | GW3 | B | 500 | 21.077 | -6.967 | 54.925 | 1.00 | 42.94 | F |
| ATOM | 7855 | F42 | GW3 | B | 500 | 20.222 | -8.479 | 56.232 | 1.00 | 43.14 | F |
| ATOM | 7856 | C08 | GW3 | B | 500 | 18.226 | -4.603 | 61.323 | 1.00 | 19.42 | C |
| ATOM | 7859 | C07 | GW3 | B | 500 | 18.167 | -3.135 | 61.780 | 1.00 | 17.71 | C |
| ATOM | 7861 | C01 | GW3 | B | 500 | 19.252 | -2.859 | 62.772 | 1.00 | 16.60 | C |
| ATOM | 7862 | C02 | GW3 | B | 500 | 20.534 | -3.387 | 62.647 | 1.00 | 18.23 | C |
| ATOM | 7864 | C03 | GW3 | B | 500 | 21.531 | -3.144 | 63.593 | 1.00 | 17.02 | C |
| ATOM | 7866 | C04 | GW3 | B | 500 | 21.241 | -2.336 | 64.672 | 1.00 | 16.12 | C |

| ATOM | 7868 | C05 | GW3 | B | 500 | 19.972 | -1.826 | 64.807 | 1.00 | 14.93 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 7870 | C06 | GW3 | B | 500 | 18.991 | -2.065 | 63.868 | 1.00 | 14.57 | C |
| ATOM | 7872 | C10 | GW3 | B | 500 | 18.269 | -2.207 | 60.620 | 1.00 | 15.98 | C |
| ATOM | 7873 | C11 | GW3 | B | 500 | 17.241 | -1.306 | 60.395 | 1.00 | 15.06 | C |
| ATOM | 7875 | C12 | GW3 | B | 500 | 17.289 | -0.426 | 59.333 | 1.00 | 15.36 | C |
| ATOM | 7877 | C13 | GW3 | B | 500 | 18.370 | -0.448 | 58.464 | 1.00 | 16.16 | C |
| ATOM | 7879 | C14 | GW3 | B | 500 | 19.398 | -1.367 | 58.689 | 1.00 | 16.09 | C |
| ATOM | 7881 | C15 | GW3 | B | 500 | 19.359 | -2.222 | 59.771 | 1.00 | 13.56 | C |
| ATOM | 7883 | O4 | IOH | B | 501 | 6.727 | 4.693 | 56.348 | 1.00 | 41.79 | O |
| ATOM | 7885 | C2 | IOH | B | 501 | 6.928 | 4.483 | 54.955 | 1.00 | 38.97 | C |
| ATOM | 7887 | C3 | IOH | B | 501 | 7.991 | 5.407 | 54.403 | 1.00 | 37.54 | C |
| ATOM | 7891 | C1 | IOH | B | 501 | 7.342 | 3.044 | 54.790 | 1.00 | 39.36 | C |
| ATOM | 7895 | N | LEU | C | 220 | -3.000 | 112.946 | 100.447 | 1.00 | 18.87 | N |
| ATOM | 7897 | CA | LEU | C | 220 | -1.866 | 113.110 | 101.401 | 1.00 | 19.26 | C |
| ATOM | 7899 | CB | LEU | C | 220 | -0.649 | 113.749 | 100.719 | 1.00 | 19.49 | C |
| ATOM | 7902 | CG | LEU | C | 220 | 0.247 | 112.935 | 99.763 | 1.00 | 19.18 | C |
| ATOM | 7904 | CD1 | LEU | C | 220 | 1.325 | 113.826 | 99.175 | 1.00 | 19.39 | C |
| ATOM | 7908 | CD2 | LEU | C | 220 | 0.900 | 111.790 | 100.458 | 1.00 | 19.53 | C |
| ATOM | 7912 | C | LEU | C | 220 | -2.326 | 113.981 | 102.564 | 1.00 | 19.20 | C |
| ATOM | 7913 | O | LEU | C | 220 | -2.819 | 115.092 | 102.359 | 1.00 | 19.47 | O |
| ATOM | 7916 | N | THR | C | 221 | -2.195 | 113.457 | 103.781 | 1.00 | 18.88 | N |
| ATOM | 7918 | CA | THR | C | 221 | -2.518 | 114.224 | 104.981 | 1.00 | 18.78 | C |
| ATOM | 7920 | CB | THR | C | 221 | -2.515 | 113.325 | 106.227 | 1.00 | 18.57 | C |
| ATOM | 7922 | OG1 | THR | C | 221 | -1.232 | 112.697 | 106.349 | 1.00 | 18.19 | O |
| ATOM | 7924 | CG2 | THR | C | 221 | -3.513 | 112.156 | 106.089 | 1.00 | 17.48 | C |
| ATOM | 7928 | C | THR | C | 221 | -1.479 | 115.313 | 105.169 | 1.00 | 18.66 | C |
| ATOM | 7929 | O | THR | C | 221 | -0.394 | 115.246 | 104.605 | 1.00 | 18.69 | O |
| ATOM | 7930 | N | ALA | C | 222 | -1.800 | 116.290 | 106.002 | 1.00 | 18.45 | N |
| ATOM | 7932 | CA | ALA | C | 222 | -0.899 | 117.404 | 106.259 | 1.00 | 18.07 | C |
| ATOM | 7934 | CB | ALA | C | 222 | -1.599 | 118.474 | 107.099 | 1.00 | 18.24 | C |
| ATOM | 7938 | C | ALA | C | 222 | 0.395 | 116.957 | 106.926 | 1.00 | 17.91 | C |
| ATOM | 7939 | O | ALA | C | 222 | 1.444 | 117.542 | 106.666 | 1.00 | 17.31 | O |
| ATOM | 7940 | N | ALA | C | 223 | 0.319 | 115.933 | 107.784 | 1.00 | 17.90 | N |
| ATOM | 7942 | CA | ALA | C | 223 | 1.515 | 115.342 | 108.397 | 1.00 | 18.20 | C |
| ATOM | 7944 | CB | ALA | C | 223 | 1.130 | 114.368 | 109.535 | 1.00 | 18.08 | C |
| ATOM | 7948 | C | ALA | C | 223 | 2.421 | 114.638 | 107.364 | 1.00 | 18.47 | C |
| ATOM | 7949 | O | ALA | C | 223 | 3.652 | 114.679 | 107.479 | 1.00 | 19.33 | O |
| ATOM | 7950 | N | GLN | C | 224 | 1.826 | 114.003 | 106.367 | 1.00 | 18.54 | N |
| ATOM | 7952 | CA | GLN | C | 224 | 2.597 | 113.414 | 105.265 | 1.00 | 19.03 | C |
| ATOM | 7954 | CB | GLN | C | 224 | 1.717 | 112.519 | 104.392 | 1.00 | 18.60 | C |
| ATOM | 7957 | CG | GLN | C | 224 | 1.353 | 111.229 | 105.093 | 1.00 | 18.65 | C |
| ATOM | 7960 | CD | GLN | C | 224 | 0.474 | 110.329 | 104.247 | 1.00 | 18.87 | C |
| ATOM | 7961 | OE1 | GLN | C | 224 | -0.411 | 110.818 | 103.525 | 1.00 | 19.17 | O |
| ATOM | 7962 | NE2 | GLN | C | 224 | 0.727 | 109.009 | 104.309 | 1.00 | 16.75 | N |
| ATOM | 7965 | C | GLN | C | 224 | 3.262 | 114.483 | 104.407 | 1.00 | 19.01 | C |
| ATOM | 7966 | O | GLN | C | 224 | 4.418 | 114.355 | 104.064 | 1.00 | 19.36 | O |
| ATOM | 7967 | N | GLU | C | 225 | 2.532 | 115.530 | 104.067 | 1.00 | 19.27 | N |
| ATOM | 7969 | CA | GLU | C | 225 | 3.083 | 116.640 | 103.290 | 1.00 | 19.85 | C |

| ATOM | 7971 | CB | GLU C 225 | 1.989 117.665 102.986 1.00 19.94 | C |
|------|------|-----|-----------|----------------------------------|---|
| ATOM | 7974 | CG | GLU C 225 | 1.021 117.179 101.936 1.00 21.92 | C |
| ATOM | 7977 | CD | GLU C 225 | 0.001 118.231 101.523 1.00 25.61 | C |
| ATOM | 7978 | OE1 | GLU C 225 | -0.425 119.047 102.395 1.00 27.21 | O |
| ATOM | 7979 | OE2 | GLU C 225 | -0.399 118.223 100.323 1.00 26.40 | O |
| ATOM | 7980 | C | GLU C 225 | 4.230 117.336 104.021 1.00 19.69 | C |
| ATOM | 7981 | O | GLU C 225 | 5.224 117.711 103.415 1.00 19.29 | O |
| ATOM | 7982 | N | LEU C 226 | 4.052 117.513 105.328 1.00 19.81 | N |
| ATOM | 7984 | CA | LEU C 226 | 5.056 118.090 106.204 1.00 19.75 | C |
| ATOM | 7986 | CB | LEU C 226 | 4.534 118.129 107.649 1.00 19.32 | C |
| ATOM | 7989 | CG | LEU C 226 | 5.504 118.634 108.724 1.00 18.59 | C |
| ATOM | 7991 | CD1 | LEU C 226 | 5.799 120.123 108.512 1.00 18.72 | C |
| ATOM | 7995 | CD2 | LEU C 226 | 4.932 118.394 110.102 1.00 18.51 | C |
| ATOM | 7999 | C | LEU C 226 | 6.336 117.263 106.131 1.00 20.57 | C |
| ATOM | 8000 | O | LEU C 226 | 7.414 117.797 105.927 1.00 20.55 | O |
| ATOM | 8001 | N | MET C 227 | 6.202 115.956 106.272 1.00 21.50 | N |
| ATOM | 8003 | CA | MET C 227 | 7.380 115.097 106.323 1.00 23.14 | C |
| ATOM | 8005 | CB | MET C 227 | 7.050 113.723 106.940 1.00 23.60 | C |
| ATOM | 8008 | CG | MET C 227 | 6.822 112.605 105.948 1.00 29.90 | C |
| ATOM | 8011 | SD | MET C 227 | 6.915 110.955 106.707 1.00 39.06 | S |
| ATOM | 8012 | CE | MET C 227 | 5.699 111.169 107.969 1.00 38.81 | C |
| ATOM | 8016 | C | MET C 227 | 8.083 115.007 104.949 1.00 22.02 | C |
| ATOM | 8017 | O | MET C 227 | 9.303 115.057 104.888 1.00 22.38 | O |
| ATOM | 8018 | N | ILE C 228 | 7.318 114.931 103.869 1.00 20.67 | N |
| ATOM | 8020 | CA | ILE C 228 | 7.885 114.908 102.516 1.00 19.93 | C |
| ATOM | 8022 | CB | ILE C 228 | 6.793 114.573 101.470 1.00 19.41 | C |
| ATOM | 8024 | CG1 | ILE C 228 | 6.298 113.147 101.664 1.00 18.75 | C |
| ATOM | 8027 | CD1 | ILE C 228 | 4.906 112.910 101.081 1.00 19.38 | C |
| ATOM | 8031 | CG2 | ILE C 228 | 7.306 114.765 100.055 1.00 19.58 | C |
| ATOM | 8035 | C | ILE C 228 | 8.580 116.223 102.144 1.00 19.60 | C |
| ATOM | 8036 | O | ILE C 228 | 9.687 116.196 101.642 1.00 19.79 | O |
| ATOM | 8037 | N | GLN C 229 | 7.917 117.361 102.374 1.00 19.12 | N |
| ATOM | 8039 | CA | GLN C 229 | 8.504 118.681 102.153 1.00 18.52 | C |
| ATOM | 8041 | CB | GLN C 229 | 7.466 119.810 102.366 1.00 18.93 | C |
| ATOM | 8044 | CG | GLN C 229 | 6.339 119.892 101.282 1.00 20.68 | C |
| ATOM | 8047 | CD | GLN C 229 | 5.131 120.826 101.661 1.00 23.87 | C |
| ATOM | 8048 | OE1 | GLN C 229 | 4.691 121.645 100.845 1.00 24.75 | O |
| ATOM | 8049 | NE2 | GLN C 229 | 4.609 120.687 102.885 1.00 26.71 | N |
| ATOM | 8052 | C | GLN C 229 | 9.738 118.890 103.042 1.00 17.73 | C |
| ATOM | 8053 | O | GLN C 229 | 10.683 119.534 102.633 1.00 17.45 | O |
| ATOM | 8054 | N | GLN C 230 | 9.738 118.332 104.248 1.00 16.98 | N |
| ATOM | 8056 | CA | GLN C 230 | 10.945 118.321 105.078 1.00 16.64 | C |
| ATOM | 8058 | CB | GLN C 230 | 10.707 117.558 106.391 1.00 16.42 | C |
| ATOM | 8061 | CG | GLN C 230 | 11.836 117.685 107.371 1.00 15.46 | C |
| ATOM | 8064 | CD | GLN C 230 | 11.893 119.027 108.013 1.00 14.19 | C |
| ATOM | 8065 | OE1 | GLN C 230 | 11.112 119.916 107.695 1.00 17.78 | O |
| ATOM | 8066 | NE2 | GLN C 230 | 12.827 119.198 108.917 1.00 19.79 | N |
| ATOM | 8069 | C | GLN C 230 | 12.143 117.666 104.377 1.00 16.24 | C |

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ATOM   8070 O   GLN C 230    13.230 118.227 104.372  1.00 15.92        O
ATOM   8071 N   LEU C 231    11.918 116.481 103.805  1.00 15.98        N
ATOM   8073 CA  LEU C 231    12.954 115.694 103.141  1.00 16.11        C
ATOM   8075 CB  LEU C 231    12.411 114.320 102.691  1.00 16.41        C
ATOM   8078 CG  LEU C 231    12.065 113.304 103.790  1.00 15.91        C
ATOM   8080 CD1 LEU C 231    11.800 111.893 103.219  1.00 15.15        C
ATOM   8084 CD2 LEU C 231    13.170 113.251 104.823  1.00 17.22        C
ATOM   8088 C   LEU C 231    13.485 116.430 101.942  1.00 16.02        C
ATOM   8089 O   LEU C 231    14.678 116.480 101.726  1.00 16.40        O
ATOM   8090 N   VAL C 232    12.591 117.047 101.191  1.00 16.32        N
ATOM   8092 CA  VAL C 232    12.930 117.678  99.924  1.00 15.86        C
ATOM   8094 CB  VAL C 232    11.656 117.989  99.145  1.00 15.91        C
ATOM   8096 CG1 VAL C 232    11.911 118.873  97.916  1.00 15.14        C
ATOM   8100 CG2 VAL C 232    10.979 116.688  98.736  1.00 16.53        C
ATOM   8104 C   VAL C 232    13.721 118.933 100.198  1.00 16.07        C
ATOM   8105 O   VAL C 232    14.623 119.287  99.448  1.00 15.57        O
ATOM   8106 N   ALA C 233    13.384 119.598 101.288  1.00 16.72        N
ATOM   8108 CA  ALA C 233    13.974 120.887 101.599  1.00 17.30        C
ATOM   8110 CB  ALA C 233    13.088 121.677 102.551  1.00 17.06        C
ATOM   8114 C   ALA C 233    15.352 120.678 102.198  1.00 18.01        C
ATOM   8115 O   ALA C 233    16.247 121.479 101.957  1.00 18.07        O
ATOM   8116 N   ALA C 234    15.511 119.608 102.978  1.00 18.89        N
ATOM   8118 CA  ALA C 234    16.817 119.210 103.489  1.00 20.13        C
ATOM   8120 CB  ALA C 234    16.679 118.070 104.482  1.00 20.02        C
ATOM   8124 C   ALA C 234    17.756 118.801 102.355  1.00 21.35        C
ATOM   8125 O   ALA C 234    18.930 119.110 102.379  1.00 21.43        O
ATOM   8126 N   GLN C 235    17.222 118.093 101.373  1.00 23.22        N
ATOM   8128 CA  GLN C 235    17.988 117.635 100.218  1.00 24.76        C
ATOM   8130 CB  GLN C 235    17.101 116.786  99.311  1.00 24.76        C
ATOM   8133 CG  GLN C 235    17.864 115.909  98.363  1.00 26.38        C
ATOM   8136 CD  GLN C 235    16.978 114.874  97.687  1.00 27.51        C
ATOM   8137 OE1 GLN C 235    16.122 115.215  96.865  1.00 28.36        O
ATOM   8138 NE2 GLN C 235    17.191 113.615  98.019  1.00 29.14        N
ATOM   8141 C   GLN C 235    18.514 118.837  99.451  1.00 25.74        C
ATOM   8142 O   GLN C 235    19.696 118.930  99.185  1.00 25.87        O
ATOM   8143 N   LEU C 236    17.620 119.771  99.140  1.00 27.09        N
ATOM   8145 CA  LEU C 236    17.975 120.996  98.459  1.00 28.40        C
ATOM   8147 CB  LEU C 236    16.730 121.850  98.198  1.00 28.61        C
ATOM   8150 CG  LEU C 236    16.998 123.063  97.296  1.00 29.58        C
ATOM   8152 CD1 LEU C 236    17.126 122.638  95.812  1.00 29.51        C
ATOM   8156 CD2 LEU C 236    15.934 124.145  97.481  1.00 29.96        C
ATOM   8160 C   LEU C 236    18.997 121.809  99.246  1.00 29.64        C
ATOM   8161 O   LEU C 236    19.898 122.392  98.652  1.00 29.50        O
ATOM   8162 N   GLN C 237    18.853 121.844 100.569  1.00 30.95        N
ATOM   8164 CA  GLN C 237    19.717 122.657 101.421  1.00 32.29        C
ATOM   8166 CB  GLN C 237    19.109 122.819 102.829  1.00 32.69        C
ATOM   8169 CG  GLN C 237    18.026 123.911 102.926  1.00 34.37        C
ATOM   8172 CD  GLN C 237    17.703 124.358 104.366  1.00 36.57        C
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ATOM   8173 OE1 GLN C 237    18.165 123.763 105.354 1.00 37.85        O
ATOM   8174 NE2 GLN C 237    16.912 125.420 104.474 1.00 36.78        N
ATOM   8177 C   GLN C 237    21.110 122.042 101.515 1.00 33.08        C
ATOM   8178 O   GLN C 237    22.104 122.759 101.564 1.00 32.91        O
ATOM   8179 N   CYS C 238    21.161 120.711 101.522 1.00 34.30        N
ATOM   8181 CA  CYS C 238    22.404 119.959 101.674 1.00 35.29        C
ATOM   8183 CB  CYS C 238    22.130 118.495 102.050 1.00 35.18        C
ATOM   8186 SG  CYS C 238    21.945 118.233 103.840 1.00 36.28        S
ATOM   8187 C   CYS C 238    23.215 120.026 100.398 1.00 36.15        C
ATOM   8188 O   CYS C 238    24.426 120.198 100.446 1.00 36.59        O
ATOM   8189 N   ASN C 239    22.539 119.924  99.260 1.00 37.18        N
ATOM   8191 CA  ASN C 239    23.199 119.984  97.955 1.00 38.14        C
ATOM   8193 CB  ASN C 239    22.407 119.148  96.918 1.00 38.24        C
ATOM   8196 CG  ASN C 239    22.074 119.921  95.658 1.00 39.13        C
ATOM   8197 OD1 ASN C 239    20.957 120.427  95.500 1.00 39.88        O
ATOM   8198 ND2 ASN C 239    23.046 120.017  94.748 1.00 39.76        N
ATOM   8201 C   ASN C 239    23.484 121.448  97.498 1.00 38.61        C
ATOM   8202 O   ASN C 239    24.366 121.689  96.666 1.00 38.64        O
ATOM   8203 N   LYS C 240    22.757 122.411  98.070 1.00 39.15        N
ATOM   8205 CA  LYS C 240    23.052 123.841  97.901 1.00 39.51        C
ATOM   8207 CB  LYS C 240    21.867 124.704  98.381 1.00 39.54        C
ATOM   8210 CG  LYS C 240    22.137 126.215  98.547 1.00 39.40        C
ATOM   8213 CD  LYS C 240    20.992 126.934  99.298 1.00 39.36        C
ATOM   8216 CE  LYS C 240    21.499 127.786 100.484 1.00 39.27        C
ATOM   8219 NZ  LYS C 240    22.193 129.051 100.069 1.00 37.35        N
ATOM   8223 C   LYS C 240    24.325 124.188  98.681 1.00 39.89        C
ATOM   8224 O   LYS C 240    25.037 125.136  98.334 1.00 39.84        O
ATOM   8225 N   ARG C 241    24.608 123.397  99.718 1.00 40.30        N
ATOM   8227 CA  ARG C 241    25.792 123.575 100.564 1.00 40.69        C
ATOM   8229 CB  ARG C 241    25.636 122.759 101.864 1.00 40.77        C
ATOM   8232 CG  ARG C 241    26.249 123.401 103.111 1.00 41.52        C
ATOM   8235 CD  ARG C 241    25.525 123.062 104.433 1.00 42.15        C
ATOM   8238 NE  ARG C 241    24.353 123.917 104.653 1.00 43.09        N
ATOM   8240 CZ  ARG C 241    24.387 125.216 104.988 1.00 44.14        C
ATOM   8241 NH1 ARG C 241    25.543 125.864 105.164 1.00 44.34        N
ATOM   8244 NH2 ARG C 241    23.244 125.881 105.147 1.00 44.22        N
ATOM   8247 C   ARG C 241    27.115 123.201  99.869 1.00 40.77        C
ATOM   8248 O   ARG C 241    28.187 123.438 100.425 1.00 40.80        O
ATOM   8249 N   SER C 242    27.032 122.620  98.668 1.00 41.06        N
ATOM   8251 CA  SER C 242    28.210 122.219  97.882 1.00 41.04        C
ATOM   8253 CB  SER C 242    28.141 120.723  97.598 1.00 41.11        C
ATOM   8256 OG  SER C 242    27.716 120.028  98.761 1.00 40.52        O
ATOM   8258 C   SER C 242    28.383 122.981  96.559 1.00 41.14        C
ATOM   8259 O   SER C 242    29.381 122.784  95.860 1.00 41.28        O
ATOM   8260 N   PHE C 243    27.417 123.831  96.210 1.00 41.19        N
ATOM   8262 CA  PHE C 243    27.605 124.812  95.134 1.00 41.30        C
ATOM   8264 CB  PHE C 243    26.339 125.665  94.910 1.00 41.49        C
ATOM   8267 CG  PHE C 243    25.168 124.930  94.268 1.00 42.57        C
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ATOM  8268 CD1 PHE C 243   25.188 123.547 94.038  1.00 43.04      C
ATOM  8270 CE1 PHE C 243   24.091 122.905 93.457  1.00 43.24      C
ATOM  8272 CZ  PHE C 243   22.962 123.636 93.103  1.00 43.20      C
ATOM  8274 CE2 PHE C 243   22.927 125.007 93.328  1.00 43.18      C
ATOM  8276 CD2 PHE C 243   24.024 125.646 93.906  1.00 43.10      C
ATOM  8278 C   PHE C 243   28.756 125.755 95.506  1.00 40.99      C
ATOM  8279 O   PHE C 243   29.512 126.199 94.635  1.00 41.16      O
ATOM  8280 N   SER C 244   28.863 126.054 96.805  1.00 40.55      N
ATOM  8282 CA  SER C 244   29.876 126.974 97.349  1.00 40.11      C
ATOM  8284 CB  SER C 244   29.395 127.581 98.681  1.00 40.14      C
ATOM  8287 OG  SER C 244   28.665 126.642 99.463  1.00 40.31      O
ATOM  8289 C   SER C 244   31.255 126.328 97.544  1.00 39.56      C
ATOM  8290 O   SER C 244   32.270 127.029 97.554  1.00 39.45      O
ATOM  8291 N   ASP C 245   31.282 125.001 97.699  1.00 38.94      N
ATOM  8293 CA  ASP C 245   32.531 124.242 97.862  1.00 38.34      C
ATOM  8295 CB  ASP C 245   32.282 122.993 98.732  1.00 38.29      C
ATOM  8298 CG  ASP C 245   31.840 123.336 100.166 1.00 38.21      C
ATOM  8299 OD1 ASP C 245   32.144 124.445 100.661 1.00 37.96      O
ATOM  8300 OD2 ASP C 245   31.190 122.543 100.882 1.00 37.27      O
ATOM  8301 C   ASP C 245   33.187 123.834 96.520  1.00 37.78      C
ATOM  8302 O   ASP C 245   34.162 123.085 96.507  1.00 37.74      O
ATOM  8303 N   GLN C 246   32.659 124.335 95.404  1.00 37.07      N
ATOM  8305 CA  GLN C 246   33.203 124.045 94.069  1.00 36.48      C
ATOM  8307 CB  GLN C 246   32.240 124.531 92.973  1.00 36.56      C
ATOM  8310 CG  GLN C 246   31.620 123.413 92.153  1.00 36.81      C
ATOM  8313 CD  GLN C 246   30.925 123.916 90.898  1.00 37.34      C
ATOM  8314 OE1 GLN C 246   31.495 124.698 90.133  1.00 37.73      O
ATOM  8315 NE2 GLN C 246   29.696 123.468 90.684  1.00 36.99      N
ATOM  8318 C   GLN C 246   34.600 124.624 93.789  1.00 35.79      C
ATOM  8319 O   GLN C 246   35.441 123.930 93.215  1.00 35.64      O
ATOM  8320 N   PRO C 247   34.853 125.881 94.167  1.00 34.98      N
ATOM  8321 CA  PRO C 247   36.138 126.525 93.844  1.00 34.39      C
ATOM  8323 CB  PRO C 247   35.916 128.005 94.218  1.00 34.46      C
ATOM  8326 CG  PRO C 247   34.498 128.134 94.692  1.00 34.61      C
ATOM  8329 CD  PRO C 247   33.962 126.776 94.927  1.00 34.91      C
ATOM  8332 C   PRO C 247   37.370 125.961 94.581  1.00 33.70      C
ATOM  8333 O   PRO C 247   38.491 126.285 94.168  1.00 33.73      O
ATOM  8334 N   LYS C 248   37.172 125.159 95.634  1.00 32.78      N
ATOM  8336 CA  LYS C 248   38.282 124.559 96.383  1.00 31.98      C
ATOM  8338 CB  LYS C 248   38.239 124.984 97.857  1.00 31.98      C
ATOM  8341 CG  LYS C 248   38.585 126.457 98.091  1.00 31.80      C
ATOM  8344 CD  LYS C 248   40.083 126.732 97.993  1.00 31.11      C
ATOM  8347 CE  LYS C 248   40.354 128.051 97.282  1.00 31.01      C
ATOM  8350 NZ  LYS C 248   41.728 128.557 97.541  1.00 30.77      N
ATOM  8354 C   LYS C 248   38.274 123.037 96.264  1.00 31.22      C
ATOM  8355 O   LYS C 248   38.158 122.320 97.259  1.00 31.21      O
ATOM  8356 N   VAL C 249   38.374 122.567 95.025  1.00 30.37      N
ATOM  8358 CA  VAL C 249   38.574 121.151 94.713  1.00 29.85      C
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| ATOM | 8360 | CB | VAL | C | 249 | 37.283 | 120.514 | 94.110 | 1.00 | 29.80 | C |
|------|------|----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 8362 | CG1 | VAL | C | 249 | 37.490 | 119.038 | 93.774 | 1.00 | 29.53 | C |
| ATOM | 8366 | CG2 | VAL | C | 249 | 36.102 | 120.671 | 95.066 | 1.00 | 29.75 | C |
| ATOM | 8370 | C | VAL | C | 249 | 39.729 | 121.052 | 93.716 | 1.00 | 29.44 | C |
| ATOM | 8371 | O | VAL | C | 249 | 40.034 | 122.026 | 93.027 | 1.00 | 29.48 | O |
| ATOM | 8372 | N | THR | C | 250 | 40.387 | 119.897 | 93.650 | 1.00 | 28.90 | N |
| ATOM | 8374 | CA | THR | C | 250 | 41.409 | 119.664 | 92.633 | 1.00 | 28.57 | C |
| ATOM | 8376 | CB | THR | C | 250 | 41.937 | 118.215 | 92.714 | 1.00 | 28.56 | C |
| ATOM | 8378 | OG1 | THR | C | 250 | 42.623 | 118.016 | 93.955 | 1.00 | 28.79 | O |
| ATOM | 8380 | CG2 | THR | C | 250 | 43.017 | 117.951 | 91.661 | 1.00 | 28.45 | C |
| ATOM | 8384 | C | THR | C | 250 | 40.786 | 119.916 | 91.259 | 1.00 | 28.27 | C |
| ATOM | 8385 | O | THR | C | 250 | 39.830 | 119.224 | 90.902 | 1.00 | 28.29 | O |
| ATOM | 8386 | N | PRO | C | 251 | 41.284 | 120.911 | 90.509 | 1.00 | 27.77 | N |
| ATOM | 8387 | CA | PRO | C | 251 | 40.749 | 121.209 | 89.169 | 1.00 | 27.44 | C |
| ATOM | 8389 | CB | PRO | C | 251 | 41.597 | 122.408 | 88.698 | 1.00 | 27.49 | C |
| ATOM | 8392 | CG | PRO | C | 251 | 42.210 | 122.975 | 89.924 | 1.00 | 27.63 | C |
| ATOM | 8395 | CD | PRO | C | 251 | 42.374 | 121.835 | 90.876 | 1.00 | 27.77 | C |
| ATOM | 8398 | C | PRO | C | 251 | 40.902 | 120.034 | 88.199 | 1.00 | 27.10 | C |
| ATOM | 8399 | O | PRO | C | 251 | 42.026 | 119.563 | 87.992 | 1.00 | 27.15 | O |
| ATOM | 8400 | N | TRP | C | 252 | 39.791 | 119.586 | 87.615 | 1.00 | 26.58 | N |
| ATOM | 8402 | CA | TRP | C | 252 | 39.769 | 118.400 | 86.751 | 1.00 | 26.32 | C |
| ATOM | 8404 | CB | TRP | C | 252 | 38.529 | 118.429 | 85.843 | 1.00 | 26.17 | C |
| ATOM | 8407 | CG | TRP | C | 252 | 38.481 | 117.305 | 84.848 | 1.00 | 26.16 | C |
| ATOM | 8408 | CD1 | TRP | C | 252 | 38.671 | 117.394 | 83.495 | 1.00 | 26.45 | C |
| ATOM | 8410 | NE1 | TRP | C | 252 | 38.563 | 116.152 | 82.917 | 1.00 | 26.21 | N |
| ATOM | 8412 | CE2 | TRP | C | 252 | 38.304 | 115.230 | 83.896 | 1.00 | 26.08 | C |
| ATOM | 8413 | CD2 | TRP | C | 252 | 38.252 | 115.924 | 85.126 | 1.00 | 25.85 | C |
| ATOM | 8414 | CE3 | TRP | C | 252 | 38.000 | 115.195 | 86.293 | 1.00 | 26.34 | C |
| ATOM | 8416 | CZ3 | TRP | C | 252 | 37.806 | 113.825 | 86.201 | 1.00 | 26.27 | C |
| ATOM | 8418 | CH2 | TRP | C | 252 | 37.868 | 113.167 | 84.962 | 1.00 | 26.42 | C |
| ATOM | 8420 | CZ2 | TRP | C | 252 | 38.114 | 113.851 | 83.803 | 1.00 | 26.19 | C |
| ATOM | 8422 | C | TRP | C | 252 | 41.055 | 118.218 | 85.919 | 1.00 | 26.10 | C |
| ATOM | 8423 | O | TRP | C | 252 | 41.200 | 118.760 | 84.825 | 1.00 | 25.72 | O |
| ATOM | 8424 | N | ARG | C | 264 | 45.285 | 110.592 | 85.368 | 1.00 | 20.90 | N |
| ATOM | 8426 | CA | ARG | C | 264 | 44.717 | 109.405 | 85.998 | 1.00 | 20.95 | C |
| ATOM | 8428 | CB | ARG | C | 264 | 45.561 | 108.170 | 85.664 | 1.00 | 21.07 | C |
| ATOM | 8431 | CG | ARG | C | 264 | 45.200 | 107.505 | 84.337 | 1.00 | 21.24 | C |
| ATOM | 8434 | CD | ARG | C | 264 | 44.318 | 106.252 | 84.458 | 1.00 | 21.59 | C |
| ATOM | 8437 | NE | ARG | C | 264 | 44.886 | 105.110 | 83.734 | 1.00 | 21.88 | N |
| ATOM | 8439 | CZ | ARG | C | 264 | 44.195 | 104.060 | 83.278 | 1.00 | 21.84 | C |
| ATOM | 8440 | NH1 | ARG | C | 264 | 42.878 | 103.963 | 83.459 | 1.00 | 21.38 | N |
| ATOM | 8443 | NH2 | ARG | C | 264 | 44.837 | 103.089 | 82.630 | 1.00 | 21.63 | N |
| ATOM | 8446 | C | ARG | C | 264 | 44.615 | 109.579 | 87.513 | 1.00 | 20.92 | C |
| ATOM | 8447 | O | ARG | C | 264 | 43.539 | 109.401 | 88.095 | 1.00 | 20.89 | O |
| ATOM | 8448 | N | GLN | C | 265 | 45.735 | 109.931 | 88.142 | 1.00 | 20.82 | N |
| ATOM | 8450 | CA | GLN | C | 265 | 45.805 | 110.075 | 89.601 | 1.00 | 20.79 | C |
| ATOM | 8452 | CB | GLN | C | 265 | 47.218 | 109.772 | 90.117 | 1.00 | 20.82 | C |
| ATOM | 8455 | CG | GLN | C | 265 | 47.861 | 108.481 | 89.567 | 1.00 | 20.84 | C |

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ATOM   8458  CD  GLN C 265    47.704 107.288  90.497  1.00 20.48      C
ATOM   8459  OE1 GLN C 265    46.649 107.105  91.114  1.00 19.44      O
ATOM   8460  NE2 GLN C 265    48.753 106.474  90.597  1.00 19.51      N
ATOM   8463  C   GLN C 265    45.376 111.476  90.055  1.00 20.74      C
ATOM   8464  O   GLN C 265    44.912 111.650  91.183  1.00 20.71      O
ATOM   8465  N   GLN C 266    45.537 112.465  89.174  1.00 20.57      N
ATOM   8467  CA  GLN C 266    45.069 113.830  89.426  1.00 20.43      C
ATOM   8469  CB  GLN C 266    45.622 114.792  88.371  1.00 20.43      C
ATOM   8472  CG  GLN C 266    47.155 114.861  88.305  1.00 20.22      C
ATOM   8475  CD  GLN C 266    47.657 115.901  87.323  1.00 19.98      C
ATOM   8476  OE1 GLN C 266    48.641 115.671  86.617  1.00 20.15      O
ATOM   8477  NE2 GLN C 266    46.990 117.048  87.277  1.00 19.72      N
ATOM   8480  C   GLN C 266    43.545 113.891  89.401  1.00 20.42      C
ATOM   8481  O   GLN C 266    42.934 114.711  90.089  1.00 20.27      O
ATOM   8482  N   ARG C 267    42.949 113.027  88.580  1.00 20.42      N
ATOM   8484  CA  ARG C 267    41.499 112.910  88.461  1.00 20.37      C
ATOM   8486  CB  ARG C 267    41.107 112.392  87.071  1.00 20.42      C
ATOM   8489  CG  ARG C 267    41.586 113.274  85.908  1.00 20.99      C
ATOM   8492  CD  ARG C 267    42.687 112.641  85.035  1.00 20.90      C
ATOM   8495  NE  ARG C 267    42.895 113.349  83.768  1.00 20.87      N
ATOM   8497  CZ  ARG C 267    42.056 113.328  82.731  1.00 20.65      C
ATOM   8498  NH1 ARG C 267    40.916 112.640  82.774  1.00 20.84      N
ATOM   8501  NH2 ARG C 267    42.354 114.011  81.637  1.00 20.00      N
ATOM   8504  C   ARG C 267    40.938 111.982  89.533  1.00 20.31      C
ATOM   8505  O   ARG C 267    39.763 112.091  89.896  1.00 20.33      O
ATOM   8506  N   PHE C 268    41.772 111.075  90.040  1.00 20.11      N
ATOM   8508  CA  PHE C 268    41.390 110.250  91.182  1.00 19.98      C
ATOM   8510  CB  PHE C 268    42.315 109.039  91.341  1.00 20.00      C
ATOM   8513  CG  PHE C 268    41.736 107.952  92.207  1.00 20.22      C
ATOM   8514  CD1 PHE C 268    40.581 107.276  91.816  1.00 20.27      C
ATOM   8516  CE1 PHE C 268    40.033 106.277  92.615  1.00 20.27      C
ATOM   8518  CZ  PHE C 268    40.635 105.946  93.824  1.00 20.50      C
ATOM   8520  CE2 PHE C 268    41.791 106.612  94.227  1.00 20.51      C
ATOM   8522  CD2 PHE C 268    42.333 107.611  93.421  1.00 20.26      C
ATOM   8524  C   PHE C 268    41.381 111.091  92.461  1.00 19.85      C
ATOM   8525  O   PHE C 268    40.639 110.801  93.387  1.00 19.72      O
ATOM   8526  N   ALA C 269    42.207 112.133  92.500  1.00 19.78      N
ATOM   8528  CA  ALA C 269    42.180 113.105  93.589  1.00 19.64      C
ATOM   8530  CB  ALA C 269    43.423 113.990  93.541  1.00 19.62      C
ATOM   8534  C   ALA C 269    40.921 113.957  93.475  1.00 19.48      C
ATOM   8535  O   ALA C 269    40.405 114.459  94.471  1.00 19.39      O
ATOM   8536  N   HIS C 270    40.440 114.119  92.246  1.00 19.23      N
ATOM   8538  CA  HIS C 270    39.238 114.888  91.978  1.00 19.12      C
ATOM   8540  CB  HIS C 270    39.206 115.315  90.512  1.00 19.16      C
ATOM   8543  CG  HIS C 270    38.099 116.264  90.199  1.00 19.71      C
ATOM   8544  ND1 HIS C 270    38.089 117.564  90.652  1.00 20.24      N
ATOM   8546  CE1 HIS C 270    36.985 118.160  90.239  1.00 20.68      C
ATOM   8548  NE2 HIS C 270    36.277 117.290  89.541  1.00 20.51      N
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ATOM  8550 CD2 HIS C 270    36.948 116.093  89.509  1.00 19.93      C
ATOM  8552 C   HIS C 270    37.965 114.111  92.336  1.00 18.88      C
ATOM  8553 O   HIS C 270    37.127 114.609  93.081  1.00 18.65      O
ATOM  8554 N   PHE C 271    37.835 112.896  91.803  1.00 18.69      N
ATOM  8556 CA  PHE C 271    36.668 112.035  92.044  1.00 18.42      C
ATOM  8558 CB  PHE C 271    36.775 110.735  91.226  1.00 18.48      C
ATOM  8561 CG  PHE C 271    36.122 110.799  89.872  1.00 18.10      C
ATOM  8562 CD1 PHE C 271    36.888 110.860  88.719  1.00 17.95      C
ATOM  8564 CE1 PHE C 271    36.289 110.908  87.468  1.00 18.02      C
ATOM  8566 CZ  PHE C 271    34.914 110.887  87.359  1.00 18.02      C
ATOM  8568 CE2 PHE C 271    34.135 110.813  88.504  1.00 17.76      C
ATOM  8570 CD2 PHE C 271    34.742 110.764  89.750  1.00 17.92      C
ATOM  8572 C   PHE C 271    36.523 111.669  93.522  1.00 18.29      C
ATOM  8573 O   PHE C 271    35.416 111.524  94.022  1.00 18.03      O
ATOM  8574 N   THR C 272    37.655 111.509  94.202  1.00 18.33      N
ATOM  8576 CA  THR C 272    37.685 111.099  95.603  1.00 18.31      C
ATOM  8578 CB  THR C 272    39.091 110.549  95.983  1.00 18.17      C
ATOM  8580 OG1 THR C 272    39.015 109.830  97.215  1.00 18.89      O
ATOM  8582 CG2 THR C 272    40.101 111.664  96.276  1.00 18.00      C
ATOM  8586 C   THR C 272    37.265 112.233  96.541  1.00 18.28      C
ATOM  8587 O   THR C 272    36.596 111.987  97.546  1.00 18.32      O
ATOM  8588 N   GLU C 273    37.659 113.464  96.210  1.00 18.25      N
ATOM  8590 CA  GLU C 273    37.298 114.644  97.002  1.00 18.23      C
ATOM  8592 CB  GLU C 273    38.113 115.878  96.570  1.00 18.38      C
ATOM  8595 CG  GLU C 273    39.536 115.927  97.123  1.00 18.56      C
ATOM  8598 CD  GLU C 273    40.359 117.064  96.531  1.00 20.02      C
ATOM  8599 OE1 GLU C 273    41.547 116.848  96.169  1.00 18.94      O
ATOM  8600 OE2 GLU C 273    39.813 118.186  96.429  1.00 21.08      O
ATOM  8601 C   GLU C 273    35.801 114.918  96.886  1.00 18.09      C
ATOM  8602 O   GLU C 273    35.174 115.382  97.844  1.00 18.05      O
ATOM  8603 N   LEU C 274    35.234 114.612  95.718  1.00 17.89      N
ATOM  8605 CA  LEU C 274    33.791 114.713  95.492  1.00 17.64      C
ATOM  8607 CB  LEU C 274    33.456 114.518  94.016  1.00 17.55      C
ATOM  8610 CG  LEU C 274    33.964 115.597  93.066  1.00 17.32      C
ATOM  8612 CD1 LEU C 274    33.914 115.071  91.641  1.00 17.35      C
ATOM  8616 CD2 LEU C 274    33.149 116.873  93.207  1.00 16.94      C
ATOM  8620 C   LEU C 274    33.013 113.683  96.293  1.00 17.56      C
ATOM  8621 O   LEU C 274    31.890 113.948  96.704  1.00 17.68      O
ATOM  8622 N   ALA C 275    33.600 112.503  96.481  1.00 17.44      N
ATOM  8624 CA  ALA C 275    32.977 111.439  97.266  1.00 17.50      C
ATOM  8626 CB  ALA C 275    33.681 110.105  97.010  1.00 17.41      C
ATOM  8630 C   ALA C 275    32.979 111.777  98.766  1.00 17.56      C
ATOM  8631 O   ALA C 275    32.071 111.395  99.476  1.00 17.28      O
ATOM  8632 N   ILE C 276    34.006 112.489  99.226  1.00 17.77      N
ATOM  8634 CA  ILE C 276    34.086 112.970 100.603  1.00 18.09      C
ATOM  8636 CB  ILE C 276    35.524 113.513 100.918  1.00 18.03      C
ATOM  8638 CG1 ILE C 276    36.571 112.390 100.870  1.00 17.64      C
ATOM  8641 CD1 ILE C 276    37.972 112.880 100.503  1.00 16.29      C
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ATOM   8645 CG2 ILE C 276    35.581 114.201 102.279 1.00 18.02      C
ATOM   8649 C   ILE C 276    33.035 114.066 100.849 1.00 18.55      C
ATOM   8650 O   ILE C 276    32.465 114.139 101.940 1.00 19.12      O
ATOM   8651 N   ILE C 277    32.788 114.909  99.842 1.00 18.93      N
ATOM   8653 CA  ILE C 277    31.794 115.992  99.930 1.00 18.94      C
ATOM   8655 CB  ILE C 277    31.920 116.946  98.719 1.00 18.90      C
ATOM   8657 CG1 ILE C 277    33.142 117.847  98.880 1.00 18.98      C
ATOM   8660 CD1 ILE C 277    33.605 118.494  97.580 1.00 19.40      C
ATOM   8664 CG2 ILE C 277    30.675 117.811  98.572 1.00 19.13      C
ATOM   8668 C   ILE C 277    30.386 115.414  99.994 1.00 19.04      C
ATOM   8669 O   ILE C 277    29.513 115.930 100.698 1.00 18.75      O
ATOM   8670 N   SER C 278    30.188 114.337  99.237 1.00 19.30      N
ATOM   8672 CA  SER C 278    28.929 113.597  99.207 1.00 19.22      C
ATOM   8674 CB  SER C 278    28.970 112.576  98.068 1.00 18.81      C
ATOM   8677 OG  SER C 278    27.859 111.716  98.118 1.00 18.64      O
ATOM   8679 C   SER C 278    28.641 112.907 100.549 1.00 19.34      C
ATOM   8680 O   SER C 278    27.498 112.856 100.984 1.00 19.25      O
ATOM   8681 N   VAL C 279    29.680 112.393 101.203 1.00 19.70      N
ATOM   8683 CA  VAL C 279    29.542 111.791 102.536 1.00 20.08      C
ATOM   8685 CB  VAL C 279    30.831 111.079 102.953 1.00 20.11      C
ATOM   8687 CG1 VAL C 279    30.789 110.670 104.441 1.00 19.99      C
ATOM   8691 CG2 VAL C 279    31.057 109.867 102.058 1.00 20.17      C
ATOM   8695 C   VAL C 279    29.151 112.822 103.614 1.00 20.30      C
ATOM   8696 O   VAL C 279    28.395 112.498 104.535 1.00 20.11      O
ATOM   8697 N   GLN C 280    29.670 114.047 103.491 1.00 20.49      N
ATOM   8699 CA  GLN C 280    29.314 115.138 104.396 1.00 20.66      C
ATOM   8701 CB  GLN C 280    30.201 116.365 104.155 1.00 20.88      C
ATOM   8704 CG  GLN C 280    31.480 116.379 104.999 1.00 21.38      C
ATOM   8707 CD  GLN C 280    32.584 117.276 104.430 1.00 22.27      C
ATOM   8708 OE1 GLN C 280    32.675 117.479 103.215 1.00 22.78      O
ATOM   8709 NE2 GLN C 280    33.426 117.803 105.310 1.00 21.95      N
ATOM   8712 C   GLN C 280    27.840 115.506 104.233 1.00 20.80      C
ATOM   8713 O   GLN C 280    27.099 115.550 105.215 1.00 20.77      O
ATOM   8714 N   GLU C 281    27.417 115.745 102.991 1.00 20.96      N
ATOM   8716 CA  GLU C 281    26.015 116.037 102.670 1.00 20.77      C
ATOM   8718 CB  GLU C 281    25.820 116.136 101.165 1.00 20.94      C
ATOM   8721 CG  GLU C 281    26.267 117.446 100.558 1.00 22.11      C
ATOM   8724 CD  GLU C 281    26.179 117.440  99.041 1.00 23.98      C
ATOM   8725 OE1 GLU C 281    25.462 116.585  98.477 1.00 23.39      O
ATOM   8726 OE2 GLU C 281    26.852 118.288  98.409 1.00 25.90      O
ATOM   8727 C   GLU C 281    25.072 114.962 103.176 1.00 20.66      C
ATOM   8728 O   GLU C 281    24.012 115.273 103.703 1.00 20.93      O
ATOM   8729 N   ILE C 282    25.456 113.703 103.003 1.00 20.10      N
ATOM   8731 CA  ILE C 282    24.625 112.581 103.424 1.00 20.08      C
ATOM   8733 CB  ILE C 282    25.168 111.241 102.838 1.00 19.67      C
ATOM   8735 CG1 ILE C 282    24.892 111.181 101.326 1.00 20.08      C
ATOM   8738 CD1 ILE C 282    25.763 110.181 100.558 1.00 18.91      C
ATOM   8742 CG2 ILE C 282    24.530 110.039 103.508 1.00 19.32      C
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|---|---|---|---|---|---|---|---|---|
| ATOM | 8746 | C | ILE C 282 | 24.471 112.522 104.958 1.00 20.40 | C |
| ATOM | 8747 | O | ILE C 282 | 23.381 112.236 105.455 1.00 20.50 | O |
| ATOM | 8748 | N | VAL C 283 | 25.538 112.797 105.705 1.00 20.21 | N |
| ATOM | 8750 | CA | VAL C 283 | 25.423 112.833 107.154 1.00 20.27 | C |
| ATOM | 8752 | CB | VAL C 283 | 26.806 112.938 107.867 1.00 20.52 | C |
| ATOM | 8754 | CG1 | VAL C 283 | 26.633 113.169 109.379 1.00 20.58 | C |
| ATOM | 8758 | CG2 | VAL C 283 | 27.647 111.682 107.624 1.00 20.67 | C |
| ATOM | 8762 | C | VAL C 283 | 24.534 114.009 107.556 1.00 20.22 | C |
| ATOM | 8763 | O | VAL C 283 | 23.676 113.865 108.419 1.00 20.19 | O |
| ATOM | 8764 | N | ASP C 284 | 24.731 115.167 106.930 1.00 20.08 | N |
| ATOM | 8766 | CA | ASP C 284 | 23.940 116.339 107.276 1.00 20.18 | C |
| ATOM | 8768 | CB | ASP C 284 | 24.420 117.573 106.530 1.00 20.38 | C |
| ATOM | 8771 | CG | ASP C 284 | 25.716 118.093 107.058 1.00 21.04 | C |
| ATOM | 8772 | OD1 | ASP C 284 | 26.314 118.964 106.387 1.00 22.47 | O |
| ATOM | 8773 | OD2 | ASP C 284 | 26.217 117.690 108.132 1.00 23.11 | O |
| ATOM | 8774 | C | ASP C 284 | 22.473 116.103 106.965 1.00 20.14 | C |
| ATOM | 8775 | O | ASP C 284 | 21.614 116.437 107.772 1.00 19.94 | O |
| ATOM | 8776 | N | PHE C 285 | 22.206 115.515 105.803 1.00 19.83 | N |
| ATOM | 8778 | CA | PHE C 285 | 20.852 115.144 105.409 1.00 20.41 | C |
| ATOM | 8780 | CB | PHE C 285 | 20.817 114.581 103.973 1.00 20.04 | C |
| ATOM | 8783 | CG | PHE C 285 | 19.473 114.040 103.557 1.00 19.95 | C |
| ATOM | 8784 | CD1 | PHE C 285 | 18.520 114.868 102.973 1.00 21.97 | C |
| ATOM | 8786 | CE1 | PHE C 285 | 17.260 114.370 102.591 1.00 20.13 | C |
| ATOM | 8788 | CZ | PHE C 285 | 16.954 113.049 102.813 1.00 20.23 | C |
| ATOM | 8790 | CE2 | PHE C 285 | 17.895 112.212 103.409 1.00 19.22 | C |
| ATOM | 8792 | CD2 | PHE C 285 | 19.142 112.711 103.779 1.00 19.53 | C |
| ATOM | 8794 | C | PHE C 285 | 20.220 114.150 106.407 1.00 21.03 | C |
| ATOM | 8795 | O | PHE C 285 | 19.068 114.320 106.798 1.00 21.37 | O |
| ATOM | 8796 | N | ALA C 286 | 20.960 113.141 106.844 1.00 21.81 | N |
| ATOM | 8798 | CA | ALA C 286 | 20.373 112.111 107.709 1.00 22.58 | C |
| ATOM | 8800 | CB | ALA C 286 | 21.329 110.961 107.908 1.00 22.49 | C |
| ATOM | 8804 | C | ALA C 286 | 19.932 112.678 109.058 1.00 22.87 | C |
| ATOM | 8805 | O | ALA C 286 | 18.931 112.253 109.613 1.00 22.86 | O |
| ATOM | 8806 | N | LYS C 287 | 20.655 113.663 109.564 1.00 23.73 | N |
| ATOM | 8808 | CA | LYS C 287 | 20.316 114.248 110.865 1.00 24.44 | C |
| ATOM | 8810 | CB | LYS C 287 | 21.479 115.080 111.405 1.00 24.36 | C |
| ATOM | 8813 | CG | LYS C 287 | 22.745 114.257 111.706 1.00 25.81 | C |
| ATOM | 8816 | CD | LYS C 287 | 23.046 114.156 113.222 1.00 28.99 | C |
| ATOM | 8819 | CE | LYS C 287 | 24.542 114.338 113.566 1.00 30.19 | C |
| ATOM | 8822 | NZ | LYS C 287 | 25.172 113.101 114.155 1.00 30.71 | N |
| ATOM | 8826 | C | LYS C 287 | 19.016 115.071 110.802 1.00 24.58 | C |
| ATOM | 8827 | O | LYS C 287 | 18.347 115.255 111.820 1.00 24.92 | O |
| ATOM | 8828 | N | GLN C 288 | 18.666 115.526 109.601 1.00 24.74 | N |
| ATOM | 8830 | CA | GLN C 288 | 17.427 116.262 109.343 1.00 24.96 | C |
| ATOM | 8832 | CB | GLN C 288 | 17.668 117.333 108.265 1.00 24.98 | C |
| ATOM | 8835 | CG | GLN C 288 | 18.403 118.574 108.803 1.00 27.94 | C |
| ATOM | 8838 | CD | GLN C 288 | 19.032 119.438 107.711 1.00 31.20 | C |
| ATOM | 8839 | OE1 | GLN C 288 | 18.397 120.370 107.199 1.00 34.35 | O |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 8840 | NE2 | GLN | C | 288 | 20.282 | 119.139 | 107.362 | 1.00 32.82 | N |
| ATOM | 8843 | C | GLN | C | 288 | 16.240 | 115.366 | 108.946 | 1.00 24.43 | C |
| ATOM | 8844 | O | GLN | C | 288 | 15.141 | 115.880 | 108.780 | 1.00 24.51 | O |
| ATOM | 8845 | N | VAL | C | 289 | 16.459 | 114.057 | 108.763 | 1.00 23.60 | N |
| ATOM | 8847 | CA | VAL | C | 289 | 15.357 | 113.121 | 108.516 | 1.00 23.06 | C |
| ATOM | 8849 | CB | VAL | C | 289 | 15.836 | 111.779 | 107.893 | 1.00 22.95 | C |
| ATOM | 8851 | CG1 | VAL | C | 289 | 14.699 | 110.780 | 107.756 | 1.00 21.64 | C |
| ATOM | 8855 | CG2 | VAL | C | 289 | 16.447 | 112.015 | 106.525 | 1.00 22.73 | C |
| ATOM | 8859 | C | VAL | C | 289 | 14.640 | 112.873 | 109.832 | 1.00 23.03 | C |
| ATOM | 8860 | O | VAL | C | 289 | 15.253 | 112.367 | 110.771 | 1.00 23.09 | O |
| ATOM | 8861 | N | PRO | C | 290 | 13.375 | 113.293 | 109.944 | 1.00 22.96 | N |
| ATOM | 8862 | CA | PRO | C | 290 | 12.570 | 113.027 | 111.150 | 1.00 22.76 | C |
| ATOM | 8864 | CB | PRO | C | 290 | 11.154 | 113.499 | 110.731 | 1.00 22.83 | C |
| ATOM | 8867 | CG | PRO | C | 290 | 11.430 | 114.619 | 109.764 | 1.00 22.49 | C |
| ATOM | 8870 | CD | PRO | C | 290 | 12.621 | 114.123 | 108.987 | 1.00 23.43 | C |
| ATOM | 8873 | C | PRO | C | 290 | 12.567 | 111.554 | 111.590 | 1.00 21.65 | C |
| ATOM | 8874 | O | PRO | C | 290 | 12.309 | 110.663 | 110.788 | 1.00 21.39 | O |
| ATOM | 8875 | N | GLY | C | 291 | 12.882 | 111.321 | 112.860 | 1.00 20.79 | N |
| ATOM | 8877 | CA | GLY | C | 291 | 13.035 | 109.984 | 113.398 | 1.00 20.41 | C |
| ATOM | 8880 | C | GLY | C | 291 | 14.489 | 109.614 | 113.646 | 1.00 20.14 | C |
| ATOM | 8881 | O | GLY | C | 291 | 14.763 | 108.826 | 114.547 | 1.00 20.00 | O |
| ATOM | 8882 | N | PHE | C | 292 | 15.414 | 110.179 | 112.866 | 1.00 20.14 | N |
| ATOM | 8884 | CA | PHE | C | 292 | 16.824 | 109.792 | 112.928 | 1.00 20.37 | C |
| ATOM | 8886 | CB | PHE | C | 292 | 17.650 | 110.499 | 111.854 | 1.00 20.24 | C |
| ATOM | 8889 | CG | PHE | C | 292 | 19.063 | 109.980 | 111.738 | 1.00 19.88 | C |
| ATOM | 8890 | CD1 | PHE | C | 292 | 19.313 | 108.730 | 111.194 | 1.00 19.73 | C |
| ATOM | 8892 | CE1 | PHE | C | 292 | 20.623 | 108.228 | 111.082 | 1.00 20.95 | C |
| ATOM | 8894 | CZ | PHE | C | 292 | 21.699 | 108.993 | 111.528 | 1.00 22.41 | C |
| ATOM | 8896 | CE2 | PHE | C | 292 | 21.454 | 110.268 | 112.078 | 1.00 22.39 | C |
| ATOM | 8898 | CD2 | PHE | C | 292 | 20.139 | 110.750 | 112.172 | 1.00 20.57 | C |
| ATOM | 8900 | C | PHE | C | 292 | 17.417 | 110.088 | 114.282 | 1.00 20.65 | C |
| ATOM | 8901 | O | PHE | C | 292 | 18.168 | 109.283 | 114.829 | 1.00 20.80 | O |
| ATOM | 8902 | N | LEU | C | 293 | 17.072 | 111.236 | 114.842 | 1.00 20.96 | N |
| ATOM | 8904 | CA | LEU | C | 293 | 17.651 | 111.623 | 116.119 | 1.00 21.58 | C |
| ATOM | 8906 | CB | LEU | C | 293 | 17.866 | 113.149 | 116.172 | 1.00 22.24 | C |
| ATOM | 8909 | CG | LEU | C | 293 | 18.982 | 113.604 | 115.169 | 1.00 24.54 | C |
| ATOM | 8911 | CD1 | LEU | C | 293 | 18.918 | 115.091 | 114.766 | 1.00 26.29 | C |
| ATOM | 8915 | CD2 | LEU | C | 293 | 20.399 | 113.299 | 115.679 | 1.00 25.36 | C |
| ATOM | 8919 | C | LEU | C | 293 | 16.890 | 111.047 | 117.328 | 1.00 21.07 | C |
| ATOM | 8920 | O | LEU | C | 293 | 17.216 | 111.353 | 118.436 | 1.00 20.52 | O |
| ATOM | 8921 | N | GLN | C | 294 | 15.916 | 110.165 | 117.076 | 1.00 21.25 | N |
| ATOM | 8923 | CA | GLN | C | 294 | 15.207 | 109.392 | 118.107 | 1.00 21.11 | C |
| ATOM | 8925 | CB | GLN | C | 294 | 13.787 | 108.996 | 117.617 | 1.00 20.66 | C |
| ATOM | 8928 | CG | GLN | C | 294 | 12.756 | 110.142 | 117.485 | 1.00 20.76 | C |
| ATOM | 8931 | CD | GLN | C | 294 | 11.395 | 109.673 | 116.957 | 1.00 20.07 | C |
| ATOM | 8932 | OE1 | GLN | C | 294 | 10.885 | 108.635 | 117.368 | 1.00 22.27 | O |
| ATOM | 8933 | NE2 | GLN | C | 294 | 10.819 | 110.435 | 116.044 | 1.00 21.53 | N |
| ATOM | 8936 | C | GLN | C | 294 | 15.995 | 108.108 | 118.460 | 1.00 21.18 | C |

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ATOM   8937 O   GLN C 294     15.890 107.565 119.573 .1.00 21.79      O
ATOM   8938 N   LEU C 295     16.762 107.618 117.489  1.00 20.56      N
ATOM   8940 CA  LEU C 295     17.617 106.457 117.676  1.00 19.97      C
ATOM   8942 CB  LEU C 295     18.184 106.000 116.331  1.00 19.84      C
ATOM   8945 CG  LEU C 295     17.120 105.608 115.308  1.00 21.51      C
ATOM   8947 CD1 LEU C 295     17.677 105.567 113.880  1.00 21.63      C
ATOM   8951 CD2 LEU C 295     16.508 104.280 115.724  1.00 22.38      C
ATOM   8955 C   LEU C 295     18.776 106.814 118.579  1.00 18.98      C
ATOM   8956 O   LEU C 295     19.174 107.979 118.657  1.00 18.87      O
ATOM   8957 N   GLY C 296     19.334 105.794 119.222  1.00 18.24      N
ATOM   8959 CA  GLY C 296     20.553 105.924 119.992  1.00 17.51      C
ATOM   8962 C   GLY C 296     21.708 106.223 119.064  1.00 17.28      C
ATOM   8963 O   GLY C 296     21.676 105.904 117.864  1.00 16.50      O
ATOM   8964 N   ARG C 297     22.722 106.867 119.610  1.00 17.04      N
ATOM   8966 CA  ARG C 297     23.866 107.274 118.814  1.00 17.85      C
ATOM   8968 CB  ARG C 297     24.914 107.939 119.702  1.00 18.51      C
ATOM   8971 CG  ARG C 297     25.970 108.701 118.932  1.00 21.03      C
ATOM   8974 CD  ARG C 297     26.565 109.885 119.697  1.00 24.13      C
ATOM   8977 NE  ARG C 297     27.446 110.642 118.814  1.00 26.89      N
ATOM   8979 CZ  ARG C 297     28.688 110.280 118.488  1.00 28.95      C
ATOM   8980 NH1 ARG C 297     29.245 109.170 118.989  1.00 28.90      N
ATOM   8983 NH2 ARG C 297     29.386 111.044 117.654  1.00 30.13      N
ATOM   8986 C   ARG C 297     24.500 106.110 118.072  1.00 17.21      C
ATOM   8987 O   ARG C 297     24.996 106.292 116.970  1.00 17.19      O
ATOM   8988 N   GLU C 298     24.485 104.927 118.684  1.00 17.07      N
ATOM   8990 CA  GLU C 298     25.127 103.732 118.118  1.00 17.04      C
ATOM   8992 CB  GLU C 298     25.210 102.597 119.172  1.00 17.47      C
ATOM   8995 CG  GLU C 298     26.611 102.225 119.675  1.00 20.19      C
ATOM   8998 CD  GLU C 298     26.928 102.699 121.098  1.00 24.27      C
ATOM   8999 OE1 GLU C 298     27.441 101.898 121.941  1.00 26.54      O
ATOM   9000 OE2 GLU C 298     26.710 103.894 121.377  1.00 26.08      O
ATOM   9001 C   GLU C 298     24.375 103.269 116.857  1.00 16.16      C
ATOM   9002 O   GLU C 298     24.988 102.930 115.857  1.00 15.40      O
ATOM   9003 N   ASP C 299     23.043 103.275 116.903  1.00 15.81      N
ATOM   9005 CA  ASP C 299     22.237 102.947 115.717  1.00 15.58      C
ATOM   9007 CB  ASP C 299     20.776 102.702 116.079  1.00 15.51      C
ATOM   9010 CG  ASP C 299     20.580 101.419 116.853  1.00 17.40      C
ATOM   9011 OD1 ASP C 299     21.597 100.704 117.109  1.00 17.79      O
ATOM   9012 OD2 ASP C 299     19.440 101.049 117.244  1.00 18.34      O
ATOM   9013 C   ASP C 299     22.323 104.014 114.631  1.00 14.43      C
ATOM   9014 O   ASP C 299     22.216 103.687 113.475  1.00 14.52      O
ATOM   9015 N   GLN C 300     22.528 105.270 115.010  1.00 13.51      N
ATOM   9017 CA  GLN C 300     22.701 106.360 114.061  1.00 13.20      C
ATOM   9019 CB  GLN C 300     22.832 107.720 114.787  1.00 13.53      C
ATOM   9022 CG  GLN C 300     21.478 108.370 115.142  1.00 14.58      C
ATOM   9025 CD  GLN C 300     21.589 109.678 115.924  1.00 16.44      C
ATOM   9026 OE1 GLN C 300     22.618 110.348 115.897  1.00 18.72      O
ATOM   9027 NE2 GLN C 300     20.521 110.036 116.625  1.00 18.19      N
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| ATOM | 9030 | C | GLN C 300 | 23.941 106.081 113.219 1.00 12.90 | C |
|---|---|---|---|---|---|
| ATOM | 9031 | O | GLN C 300 | 23.890 106.120 111.982 1.00 12.11 | O |
| ATOM | 9032 | N | ILE C 301 | 25.042 105.771 113.907 1.00 12.62 | N |
| ATOM | 9034 | CA | ILE C 301 | 26.318 105.476 113.264 1.00 12.44 | C |
| ATOM | 9036 | CB | ILE C 301 | 27.455 105.338 114.313 1.00 12.75 | C |
| ATOM | 9038 | CG1 | ILE C 301 | 27.860 106.724 114.830 1.00 13.07 | C |
| ATOM | 9041 | CD1 | ILE C 301 | 28.710 106.675 116.118 1.00 13.04 | C |
| ATOM | 9045 | CG2 | ILE C 301 | 28.698 104.619 113.728 1.00 12.96 | C |
| ATOM | 9049 | C | ILE C 301 | 26.210 104.240 112.389 1.00 12.02 | C |
| ATOM | 9050 | O | ILE C 301 | 26.632 104.279 111.247 1.00 12.15 | O |
| ATOM | 9051 | N | ALA C 302 | 25.607 103.172 112.897 1.00 11.82 | N |
| ATOM | 9053 | CA | ALA C 302 | 25.437 101.932 112.124 1.00 12.16 | C |
| ATOM | 9055 | CB | ALA C 302 | 24.883 100.831 113.008 1.00 12.16 | C |
| ATOM | 9059 | C | ALA C 302 | 24.542 102.103 110.887 1.00 12.54 | C |
| ATOM | 9060 | O | ALA C 302 | 24.791 101.527 109.835 1.00 12.70 | O |
| ATOM | 9061 | N | LEU C 303 | 23.498 102.896 111.009 1.00 13.13 | N |
| ATOM | 9063 | CA | LEU C 303 | 22.589 103.099 109.891 1.00 13.77 | C |
| ATOM | 9065 | CB | LEU C 303 | 21.304 103.819 110.334 1.00 14.12 | C |
| ATOM | 9068 | CG | LEU C 303 | 20.322 102.935 111.135 1.00 15.21 | C |
| ATOM | 9070 | CD1 | LEU C 303 | 19.016 103.660 111.413 1.00 14.75 | C |
| ATOM | 9074 | CD2 | LEU C 303 | 20.057 101.608 110.416 1.00 15.95 | C |
| ATOM | 9078 | C | LEU C 303 | 23.306 103.860 108.794 1.00 13.54 | C |
| ATOM | 9079 | O | LEU C 303 | 23.239 103.469 107.649 1.00 12.29 | O |
| ATOM | 9080 | N | LEU C 304 | 24.036 104.903 109.171 1.00 14.20 | N |
| ATOM | 9082 | CA | LEU C 304 | 24.788 105.725 108.220 1.00 15.18 | C |
| ATOM | 9084 | CB | LEU C 304 | 25.385 106.950 108.907 1.00 15.36 | C |
| ATOM | 9087 | CG | LEU C 304 | 24.481 108.164 109.057 1.00 15.79 | C |
| ATOM | 9089 | CD1 | LEU C 304 | 25.251 109.220 109.808 1.00 17.72 | C |
| ATOM | 9093 | CD2 | LEU C 304 | 23.994 108.696 107.718 1.00 15.50 | C |
| ATOM | 9097 | C | LEU C 304 | 25.913 104.983 107.527 1.00 15.76 | C |
| ATOM | 9098 | O | LEU C 304 | 26.124 105.161 106.347 1.00 16.32 | O |
| ATOM | 9099 | N | LYS C 305 | 26.631 104.161 108.276 1.00 16.60 | N |
| ATOM | 9101 | CA | LYS C 305 | 27.737 103.358 107.751 1.00 16.99 | C |
| ATOM | 9103 | CB | LYS C 305 | 28.447 102.638 108.909 1.00 16.84 | C |
| ATOM | 9106 | CG | LYS C 305 | 29.930 102.380 108.702 1.00 17.61 | C |
| ATOM | 9109 | CD | LYS C 305 | 30.525 101.476 109.823 1.00 17.48 | C |
| ATOM | 9112 | CE | LYS C 305 | 31.043 100.146 109.246 1.00 18.13 | C |
| ATOM | 9115 | NZ | LYS C 305 | 31.784 99.317 110.254 1.00 17.66 | N |
| ATOM | 9119 | C | LYS C 305 | 27.267 102.343 106.691 1.00 17.22 | C |
| ATOM | 9120 | O | LYS C 305 | 27.893 102.188 105.641 1.00 17.91 | O |
| ATOM | 9121 | N | ALA C 306 | 26.163 101.659 106.952 1.00 17.29 | N |
| ATOM | 9123 | CA | ALA C 306 | 25.659 100.665 106.005 1.00 17.55 | C |
| ATOM | 9125 | CB | ALA C 306 | 24.718 99.703 106.705 1.00 17.28 | C |
| ATOM | 9129 | C | ALA C 306 | 24.949 101.325 104.820 1.00 17.94 | C |
| ATOM | 9130 | O | ALA C 306 | 24.726 100.695 103.794 1.00 18.97 | O |
| ATOM | 9131 | N | SER C 307 | 24.617 102.595 104.962 1.00 17.58 | N |
| ATOM | 9133 | CA | SER C 307 | 23.710 103.250 104.054 1.00 17.92 | C |
| ATOM | 9135 | CB | SER C 307 | 22.611 103.921 104.866 1.00 17.61 | C |

| ATOM | 9138 | OG  | SER C 307 | 21.768 | 104.633 | 104.024 | 1.00 | 20.18 | O |
|------|------|-----|-----------|--------|---------|---------|------|-------|---|
| ATOM | 9140 | C   | SER C 307 | 24.360 | 104.304 | 103.183 | 1.00 | 17.67 | C |
| ATOM | 9141 | O   | SER C 307 | 23.809 | 104.652 | 102.137 | 1.00 | 17.60 | O |
| ATOM | 9142 | N   | THR C 308 | 25.506 | 104.825 | 103.618 | 1.00 | 17.29 | N |
| ATOM | 9144 | CA  | THR C 308 | 26.125 | 105.959 | 102.965 | 1.00 | 17.23 | C |
| ATOM | 9146 | CB  | THR C 308 | 27.434 | 106.362 | 103.702 | 1.00 | 17.35 | C |
| ATOM | 9148 | OG1 | THR C 308 | 27.109 | 107.106 | 104.891 | 1.00 | 17.54 | O |
| ATOM | 9150 | CG2 | THR C 308 | 28.291 | 107.348 | 102.868 | 1.00 | 17.21 | C |
| ATOM | 9154 | C   | THR C 308 | 26.372 | 105.642 | 101.482 | 1.00 | 17.56 | C |
| ATOM | 9155 | O   | THR C 308 | 26.035 | 106.446 | 100.611 | 1.00 | 17.67 | O |
| ATOM | 9156 | N   | ILE C 309 | 26.923 | 104.467 | 101.198 | 1.00 | 17.29 | N |
| ATOM | 9158 | CA  | ILE C 309 | 27.253 | 104.119 | 99.821  | 1.00 | 17.69 | C |
| ATOM | 9160 | CB  | ILE C 309 | 28.162 | 102.861 | 99.742  | 1.00 | 17.33 | C |
| ATOM | 9162 | CG1 | ILE C 309 | 28.721 | 102.688 | 98.331  | 1.00 | 17.70 | C |
| ATOM | 9165 | CD1 | ILE C 309 | 29.720 | 103.754 | 97.938  | 1.00 | 18.00 | C |
| ATOM | 9169 | CG2 | ILE C 309 | 27.410 | 101.612 | 100.150 | 1.00 | 17.46 | C |
| ATOM | 9173 | C   | ILE C 309 | 25.988 | 103.953 | 98.987  | 1.00 | 17.79 | C |
| ATOM | 9174 | O   | ILE C 309 | 25.950 | 104.360 | 97.835  | 1.00 | 18.04 | O |
| ATOM | 9175 | N   | GLU C 310 | 24.951 | 103.376 | 99.581  | 1.00 | 17.94 | N |
| ATOM | 9177 | CA  | GLU C 310 | 23.710 | 103.120 | 98.859  | 1.00 | 17.79 | C |
| ATOM | 9179 | CB  | GLU C 310 | 22.748 | 102.262 | 99.693  | 1.00 | 18.15 | C |
| ATOM | 9182 | CG  | GLU C 310 | 23.042 | 100.776 | 99.576  | 1.00 | 19.42 | C |
| ATOM | 9185 | CD  | GLU C 310 | 22.258 | 99.903  | 100.554 | 1.00 | 21.85 | C |
| ATOM | 9186 | OE1 | GLU C 310 | 21.036 | 100.097 | 100.753 | 1.00 | 23.35 | O |
| ATOM | 9187 | OE2 | GLU C 310 | 22.877 | 98.978  | 101.108 | 1.00 | 23.35 | O |
| ATOM | 9188 | C   | GLU C 310 | 23.050 | 104.419 | 98.471  | 1.00 | 17.12 | C |
| ATOM | 9189 | O   | GLU C 310 | 22.480 | 104.525 | 97.397  | 1.00 | 16.96 | O |
| ATOM | 9190 | N   | ILE C 311 | 23.129 | 105.404 | 99.358  | 1.00 | 16.43 | N |
| ATOM | 9192 | CA  | ILE C 311 | 22.578 | 106.728 | 99.094  | 1.00 | 15.75 | C |
| ATOM | 9194 | CB  | ILE C 311 | 22.456 | 107.529 | 100.423 | 1.00 | 15.35 | C |
| ATOM | 9196 | CG1 | ILE C 311 | 21.415 | 106.873 | 101.335 | 1.00 | 16.03 | C |
| ATOM | 9199 | CD1 | ILE C 311 | 21.551 | 107.259 | 102.769 | 1.00 | 16.89 | C |
| ATOM | 9203 | CG2 | ILE C 311 | 22.061 | 108.947 | 100.163 | 1.00 | 14.17 | C |
| ATOM | 9207 | C   | ILE C 311 | 23.399 | 107.492 | 98.040  | 1.00 | 15.16 | C |
| ATOM | 9208 | O   | ILE C 311 | 22.859 | 108.298 | 97.303  | 1.00 | 14.74 | O |
| ATOM | 9209 | N   | MET C 312 | 24.699 | 107.229 | 97.985  | 1.00 | 15.30 | N |
| ATOM | 9211 | CA  | MET C 312 | 25.610 | 107.877 | 97.031  | 1.00 | 15.36 | C |
| ATOM | 9213 | CB  | MET C 312 | 27.070 | 107.524 | 97.347  | 1.00 | 15.73 | C |
| ATOM | 9216 | CG  | MET C 312 | 27.768 | 108.490 | 98.286  | 1.00 | 16.56 | C |
| ATOM | 9219 | SD  | MET C 312 | 29.474 | 107.991 | 98.640  | 1.00 | 20.13 | S |
| ATOM | 9220 | CE  | MET C 312 | 30.310 | 108.784 | 97.288  | 1.00 | 17.77 | C |
| ATOM | 9224 | C   | MET C 312 | 25.278 | 107.471 | 95.596  | 1.00 | 14.87 | C |
| ATOM | 9225 | O   | MET C 312 | 25.300 | 108.307 | 94.702  | 1.00 | 14.39 | O |
| ATOM | 9226 | N   | LEU C 313 | 24.952 | 106.193 | 95.419  | 1.00 | 14.90 | N |
| ATOM | 9228 | CA  | LEU C 313 | 24.505 | 105.629 | 94.154  | 1.00 | 15.60 | C |
| ATOM | 9230 | CB  | LEU C 313 | 24.507 | 104.098 | 94.240  | 1.00 | 15.52 | C |
| ATOM | 9233 | CG  | LEU C 313 | 25.902 | 103.473 | 94.345  | 1.00 | 17.07 | C |
| ATOM | 9235 | CD1 | LEU C 313 | 25.806 | 101.985 | 94.642  | 1.00 | 17.63 | C |

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ATOM   9239 CD2 LEU C 313      26.747 103.716 93.058 1.00 16.98      C
ATOM   9243 C   LEU C 313      23.114 106.109 93.734 1.00 15.79      C
ATOM   9244 O   LEU C 313      22.864 106.313 92.550 1.00 15.46      O
ATOM   9245 N   LEU C 314      22.204 106.255 94.691 1.00 16.14      N
ATOM   9247 CA  LEU C 314      20.868 106.790 94.405 1.00 16.84      C
ATOM   9249 CB  LEU C 314      19.988 106.744 95.646 1.00 17.11      C
ATOM   9252 CG  LEU C 314      18.631 106.002 95.673 1.00 18.67      C
ATOM   9254 CD1 LEU C 314      18.454 104.919 94.622 1.00 19.10      C
ATOM   9258 CD2 LEU C 314      18.413 105.431 97.060 1.00 18.21      C
ATOM   9262 C   LEU C 314      21.008 108.233 93.930 1.00 17.27      C
ATOM   9263 O   LEU C 314      20.398 108.652 92.947 1.00 16.54      O
ATOM   9264 N   GLU C 315      21.849 108.984 94.625 1.00 18.07      N
ATOM   9266 CA  GLU C 315      22.054 110.384 94.302 1.00 18.87      C
ATOM   9268 CB  GLU C 315      22.813 111.098 95.425 1.00 19.21      C
ATOM   9271 CG  GLU C 315      21.916 111.532 96.579 1.00 21.88      C
ATOM   9274 CD  GLU C 315      20.858 112.565 96.165 1.00 24.16      C
ATOM   9275 OE1 GLU C 315      21.225 113.574 95.497 1.00 21.62      O
ATOM   9276 OE2 GLU C 315      19.663 112.350 96.523 1.00 26.27      O
ATOM   9277 C   GLU C 315      22.791 110.539 92.983 1.00 18.54      C
ATOM   9278 O   GLU C 315      22.670 111.569 92.332 1.00 18.60      O
ATOM   9279 N   THR C 316      23.551 109.518 92.601 1.00 18.27      N
ATOM   9281 CA  THR C 316      24.222 109.492 91.303 1.00 18.13      C
ATOM   9283 CB  THR C 316      25.325 108.403 91.293 1.00 18.21      C
ATOM   9285 OG1 THR C 316      26.248 108.631 92.366 1.00 17.85      O
ATOM   9287 CG2 THR C 316      26.194 108.503 90.056 1.00 17.93      C
ATOM   9291 C   THR C 316      23.207 109.252 90.182 1.00 17.91      C
ATOM   9292 O   THR C 316      23.266 109.901 89.151 1.00 17.49      O
ATOM   9293 N   ALA C 317      22.273 108.334 90.409 1.00 18.09      N
ATOM   9295 CA  ALA C 317      21.209 108.043 89.455 1.00 18.68      C
ATOM   9297 CB  ALA C 317      20.323 106.940 89.984 1.00 18.51      C
ATOM   9301 C   ALA C 317      20.376 109.281 89.184 1.00 19.16      C
ATOM   9302 O   ALA C 317      20.025 109.573 88.041 1.00 19.81      O
ATOM   9303 N   ARG C 318      20.089 109.999 90.259 1.00 19.76      N
ATOM   9305 CA  ARG C 318      19.295 111.223 90.255 1.00 20.42      C
ATOM   9307 CB  ARG C 318      19.186 111.748 91.700 1.00 20.76      C
ATOM   9310 CG  ARG C 318      18.008 112.671 91.970 1.00 22.67      C
ATOM   9313 CD  ARG C 318      17.778 112.996 93.461 1.00 25.30      C
ATOM   9316 NE  ARG C 318      17.341 114.383 93.585 1.00 28.53      N
ATOM   9318 CZ  ARG C 318      18.118 115.416 93.905 1.00 31.39      C
ATOM   9319 NH1 ARG C 318      19.402 115.254 94.208 1.00 32.11      N
ATOM   9322 NH2 ARG C 318      17.592 116.637 93.944 1.00 33.77      N
ATOM   9325 C   ARG C 318      19.867 112.314 89.344 1.00 20.16      C
ATOM   9326 O   ARG C 318      19.115 113.096 88.762 1.00 19.94      O
ATOM   9327 N   ARG C 319      21.196 112.350 89.231 1.00 20.23      N
ATOM   9329 CA  ARG C 319      21.914 113.378 88.481 1.00 20.06      C
ATOM   9331 CB  ARG C 319      23.107 113.855 89.296 1.00 20.26      C
ATOM   9334 CG  ARG C 319      22.759 114.309 90.693 1.00 20.52      C
ATOM   9337 CD  ARG C 319      23.907 114.217 91.677 1.00 21.72      C
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ATOM  9340 NE  ARG C 319    23.590 114.904 92.926 1.00 22.55        N
ATOM  9342 CZ  ARG C 319    24.210 115.987 93.380 1.00 23.92        C
ATOM  9343 NH1 ARG C 319    25.215 116.541 92.715 1.00 24.46        N
ATOM  9346 NH2 ARG C 319    23.821 116.524 94.526 1.00 27.00        N
ATOM  9349 C   ARG C 319    22.418 112.867 87.145 1.00 19.89        C
ATOM  9350 O   ARG C 319    23.149 113.567 86.433 1.00 20.03        O
ATOM  9351 N   TYR C 320    22.037 111.642 86.810 1.00 19.62        N
ATOM  9353 CA  TYR C 320    22.320 111.076 85.504 1.00 19.68        C
ATOM  9355 CB  TYR C 320    22.233 109.552 85.567 1.00 19.69        C
ATOM  9358 CG  TYR C 320    22.370 108.864 84.234 1.00 19.58        C
ATOM  9359 CD1 TYR C 320    23.619 108.618 83.689 1.00 19.48        C
ATOM  9361 CE1 TYR C 320    23.752 107.980 82.469 1.00 20.36        C
ATOM  9363 CZ  TYR C 320    22.622 107.569 81.780 1.00 20.53        C
ATOM  9364 OH  TYR C 320    22.766 106.938 80.565 1.00 21.22        O
ATOM  9366 CE2 TYR C 320    21.364 107.799 82.310 1.00 20.30        C
ATOM  9368 CD2 TYR C 320    21.247 108.444 83.530 1.00 19.79        C
ATOM  9370 C   TYR C 320    21.314 111.626 84.498 1.00 19.59        C
ATOM  9371 O   TYR C 320    20.112 111.379 84.597 1.00 19.48        O
ATOM  9372 N   ASN C 321    21.815 112.392 83.545 1.00 19.68        N
ATOM  9374 CA  ASN C 321    20.994 112.914 82.467 1.00 20.13        C
ATOM  9376 CB  ASN C 321    21.498 114.318 82.075 1.00 20.08        C
ATOM  9379 CG  ASN C 321    20.898 114.833 80.780 1.00 19.57        C
ATOM  9380 OD1 ASN C 321    19.709 115.125 80.693 1.00 19.18        O
ATOM  9381 ND2 ASN C 321    21.729 114.961 79.773 1.00 19.05        N
ATOM  9384 C   ASN C 321    21.097 111.899 81.331 1.00 20.57        C
ATOM  9385 O   ASN C 321    22.182 111.673 80.800 1.00 20.58        O
ATOM  9386 N   HIS C 322    19.991 111.246 80.988 1.00 21.24        N
ATOM  9388 CA  HIS C 322    20.062 110.134 80.036 1.00 22.18        C
ATOM  9390 CB  HIS C 322    18.906 109.134 80.230 1.00 22.76        C
ATOM  9393 CG  HIS C 322    19.082 107.859 79.450 1.00 24.65        C
ATOM  9394 ND1 HIS C 322    20.283 107.180 79.393 1.00 26.22        N
ATOM  9396 CE1 HIS C 322    20.153 106.117 78.619 1.00 26.44        C
ATOM  9398 NE2 HIS C 322    18.914 106.083 78.165 1.00 26.75        N
ATOM  9400 CD2 HIS C 322    18.223 107.163 78.666 1.00 25.69        C
ATOM  9402 C   HIS C 322    20.157 110.567 78.564 1.00 21.92        C
ATOM  9403 O   HIS C 322    20.459 109.737 77.708 1.00 21.93        O
ATOM  9404 N   GLU C 323    19.920 111.848 78.275 1.00 21.88        N
ATOM  9406 CA  GLU C 323    20.111 112.377 76.920 1.00 21.96        C
ATOM  9408 CB  GLU C 323    19.542 113.791 76.792 1.00 22.16        C
ATOM  9411 CG  GLU C 323    18.038 113.911 76.989 1.00 22.94        C
ATOM  9414 CD  GLU C 323    17.628 115.303 77.441 1.00 24.39        C
ATOM  9415 OE1 GLU C 323    17.567 115.537 78.673 1.00 25.93        O
ATOM  9416 OE2 GLU C 323    17.373 116.165 76.564 1.00 24.78        O
ATOM  9417 C   GLU C 323    21.590 112.405 76.530 1.00 21.66        C
ATOM  9418 O   GLU C 323    21.941 112.094 75.392 1.00 21.39        O
ATOM  9419 N   THR C 324    22.450 112.771 77.483 1.00 21.55        N
ATOM  9421 CA  THR C 324    23.888 112.926 77.222 1.00 21.44        C
ATOM  9423 CB  THR C 324    24.458 114.149 77.996 1.00 21.46        C
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| ATOM | 9425 | OG1 | THR | C | 324 | 24.155 | 114.039 | 79.395 | 1.00 | 21.39 | O |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 9427 | CG2 | THR | C | 324 | 23.788 | 115.458 | 77.562 | 1.00 | 21.27 | C |
| ATOM | 9431 | C | THR | C | 324 | 24.681 | 111.676 | 77.606 | 1.00 | 21.34 | C |
| ATOM | 9432 | O | THR | C | 324 | 25.782 | 111.411 | 77.016 | 1.00 | 21.11 | O |
| ATOM | 9433 | N | GLU | C | 325 | 24.103 | 110.903 | 78.554 | 1.00 | 21.19 | N |
| ATOM | 9435 | CA | GLU | C | 325 | 24.776 | 109.764 | 79.197 | 1.00 | 21.16 | C |
| ATOM | 9437 | CB | GLU | C | 325 | 25.119 | 108.669 | 78.158 | 1.00 | 21.14 | C |
| ATOM | 9440 | CG | GLU | C | 325 | 24.070 | 108.514 | 77.053 | 1.00 | 20.93 | C |
| ATOM | 9443 | CD | GLU | C | 325 | 24.344 | 107.353 | 76.119 | 1.00 | 20.84 | C |
| ATOM | 9444 | OE1 | GLU | C | 325 | 24.703 | 107.598 | 74.945 | 1.00 | 21.88 | O |
| ATOM | 9445 | OE2 | GLU | C | 325 | 24.187 | 106.197 | 76.549 | 1.00 | 21.05 | O |
| ATOM | 9446 | C | GLU | C | 325 | 26.036 | 110.269 | 79.970 | 1.00 | 21.06 | C |
| ATOM | 9447 | O | GLU | C | 325 | 27.224 | 109.694 | 79.857 | 1.00 | 21.38 | O |
| ATOM | 9448 | N | CYS | C | 326 | 25.708 | 111.351 | 80.773 | 1.00 | 20.97 | N |
| ATOM | 9450 | CA | CYS | C | 326 | 26.638 | 112.032 | 81.698 | 1.00 | 20.62 | C |
| ATOM | 9452 | CB | CYS | C | 326 | 27.039 | 113.380 | 81.119 | 1.00 | 20.62 | C |
| ATOM | 9455 | SG | CYS | C | 326 | 28.207 | 113.283 | 79.778 | 1.00 | 21.03 | S |
| ATOM | 9456 | C | CYS | C | 326 | 26.026 | 112.336 | 83.057 | 1.00 | 20.08 | C |
| ATOM | 9457 | O | CYS | C | 326 | 24.871 | 112.744 | 83.144 | 1.00 | 19.85 | O |
| ATOM | 9458 | N | ILE | C | 327 | 26.835 | 112.188 | 84.104 | 1.00 | 19.97 | N |
| ATOM | 9460 | CA | ILE | C | 327 | 26.443 | 112.495 | 85.478 | 1.00 | 19.57 | C |
| ATOM | 9462 | CB | ILE | C | 327 | 27.039 | 111.441 | 86.438 | 1.00 | 19.77 | C |
| ATOM | 9464 | CG1 | ILE | C | 327 | 26.508 | 110.036 | 86.107 | 1.00 | 19.43 | C |
| ATOM | 9467 | CD1 | ILE | C | 327 | 27.416 | 108.924 | 86.561 | 1.00 | 18.68 | C |
| ATOM | 9471 | CG2 | ILE | C | 327 | 26.765 | 111.821 | 87.922 | 1.00 | 19.37 | C |
| ATOM | 9475 | C | ILE | C | 327 | 26.990 | 113.869 | 85.852 | 1.00 | 19.48 | C |
| ATOM | 9476 | O | ILE | C | 327 | 28.184 | 114.129 | 85.672 | 1.00 | 19.10 | O |
| ATOM | 9477 | N | THR | C | 328 | 26.135 | 114.739 | 86.383 | 1.00 | 19.40 | N |
| ATOM | 9479 | CA | THR | C | 328 | 26.593 | 116.023 | 86.908 | 1.00 | 19.52 | C |
| ATOM | 9481 | CB | THR | C | 328 | 25.653 | 117.175 | 86.477 | 1.00 | 19.52 | C |
| ATOM | 9483 | OG1 | THR | C | 328 | 25.854 | 117.485 | 85.092 | 1.00 | 19.32 | O |
| ATOM | 9485 | CG2 | THR | C | 328 | 26.014 | 118.488 | 87.177 | 1.00 | 19.86 | C |
| ATOM | 9489 | C | THR | C | 328 | 26.711 | 115.954 | 88.436 | 1.00 | 19.67 | C |
| ATOM | 9490 | O | THR | C | 328 | 25.769 | 115.566 | 89.123 | 1.00 | 19.59 | O |
| ATOM | 9491 | N | PHE | C | 329 | 27.891 | 116.292 | 88.950 | 1.00 | 19.88 | N |
| ATOM | 9493 | CA | PHE | C | 329 | 28.098 | 116.475 | 90.379 | 1.00 | 19.94 | C |
| ATOM | 9495 | CB | PHE | C | 329 | 29.397 | 115.806 | 90.819 | 1.00 | 19.76 | C |
| ATOM | 9498 | CG | PHE | C | 329 | 29.383 | 114.313 | 90.717 | 1.00 | 18.14 | C |
| ATOM | 9499 | CD1 | PHE | C | 329 | 30.363 | 113.649 | 89.997 | 1.00 | 16.96 | C |
| ATOM | 9501 | CE1 | PHE | C | 329 | 30.365 | 112.273 | 89.906 | 1.00 | 16.32 | C |
| ATOM | 9503 | CZ | PHE | C | 329 | 29.394 | 111.547 | 90.530 | 1.00 | 16.17 | C |
| ATOM | 9505 | CE2 | PHE | C | 329 | 28.409 | 112.194 | 91.261 | 1.00 | 16.95 | C |
| ATOM | 9507 | CD2 | PHE | C | 329 | 28.410 | 113.574 | 91.351 | 1.00 | 16.75 | C |
| ATOM | 9509 | C | PHE | C | 329 | 28.152 | 117.961 | 90.744 | 1.00 | 20.54 | C |
| ATOM | 9510 | O | PHE | C | 329 | 28.429 | 118.823 | 89.898 | 1.00 | 20.45 | O |
| ATOM | 9511 | N | LEU | C | 330 | 27.919 | 118.237 | 92.025 | 1.00 | 21.19 | N |
| ATOM | 9513 | CA | LEU | C | 330 | 27.909 | 119.601 | 92.551 | 1.00 | 21.69 | C |
| ATOM | 9515 | CB | LEU | C | 330 | 29.313 | 120.228 | 92.474 | 1.00 | 21.81 | C |

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ATOM  9518 CG  LEU C 330    30.423 119.461 93.203 1.00 22.11      ·C
ATOM  9520 CD1 LEU C 330    31.743 120.211 93.078 1.00 22.18       C
ATOM  9524 CD2 LEU C 330    30.072 119.207 94.672 1.00 22.18       C
ATOM  9528 C   LEU C 330    26.844 120.444 91.840 1.00 21.87       C
ATOM  9529 O   LEU C 330    25.654 120.194 92.023 1.00 22.10       O
ATOM  9530 N   LYS C 331    27.261 121.424 91.044 1.00 22.12       N
ATOM  9532 CA  LYS C 331    26.334 122.295 90.322 1.00 22.48       C
ATOM  9534 CB  LYS C 331    26.458 123.749 90.834 1.00 22.55       C
ATOM  9537 CG  LYS C 331    26.826 124.834 89.803 1.00 22.78       C
ATOM  9540 CD  LYS C 331    26.989 126.218 90.460 1.00 23.07       C
ATOM  9543 CE  LYS C 331    28.382 126.811 90.254 1.00 23.08       C
ATOM  9546 NZ  LYS C 331    28.572 127.396 88.894 1.00 23.45       N
ATOM  9550 C   LYS C 331    26.541 122.200 88.808 1.00 22.62       C
ATOM  9551 O   LYS C 331    25.567 122.128 88.063 1.00 22.83       O
ATOM  9552 N   ASP C 332    27.799 122.180 88.366 1.00 22.77       N
ATOM  9554 CA  ASP C 332    28.136 122.276 86.943 1.00 22.91       C
ATOM  9556 CB  ASP C 332    28.802 123.631 86.668 1.00 22.95       C
ATOM  9559 CG  ASP C 332    27.814 124.690 86.214 1.00 23.26       C
ATOM  9560 OD1 ASP C 332    26.648 124.671 86.676 1.00 25.08       O
ATOM  9561 OD2 ASP C 332    28.117 125.586 85.405 1.00 21.44       O
ATOM  9562 C   ASP C 332    29.052 121.178 86.409 1.00 22.95       C
ATOM  9563 O   ASP C 332    29.148 121.017 85.196 1.00 23.16       O
ATOM  9564 N   PHE C 333    29.738 120.441 87.280 1.00 23.00       N
ATOM  9566 CA  PHE C 333    30.737 119.471 86.822 1.00 22.97       C
ATOM  9568 CB  PHE C 333    31.664 119.047 87.969 1.00 23.05       C
ATOM  9571 CG  PHE C 333    32.486 120.174 88.566 1.00 23.21       C
ATOM  9572 CD1 PHE C 333    32.605 121.412 87.940 1.00 23.89       C
ATOM  9574 CE1 PHE C 333    33.371 122.429 88.504 1.00 23.79       C
ATOM  9576 CZ  PHE C 333    34.024 122.218 89.701 1.00 23.41       C
ATOM  9578 CE2 PHE C 333    33.916 120.996 90.334 1.00 23.59       C
ATOM  9580 CD2 PHE C 333    33.151 119.981 89.768 1.00 23.64       C
ATOM  9582 C   PHE C 333    30.054 118.243 86.224 1.00 22.95       C
ATOM  9583 O   PHE C 333    29.189 117.651 86.859 1.00 23.10       O
ATOM  9584 N   THR C 334    30.448 117.876 85.004 1.00 22.92       N
ATOM  9586 CA  THR C 334    29.836 116.767 84.263 1.00 22.91       C
ATOM  9588 CB  THR C 334    29.052 117.321 83.039 1.00 22.95       C
ATOM  9590 OG1 THR C 334    27.653 117.052 83.200 1.00 23.46       O
ATOM  9592 CG2 THR C 334    29.402 116.617 81.733 1.00 23.14       C
ATOM  9596 C   THR C 334    30.887 115.738 83.846 1.00 22.78       C
ATOM  9597 O   THR C 334    32.030 116.093 83.563 1.00 22.83       O
ATOM  9598 N   TYR C 335    30.483 114.467 83.798 1.00 22.76       N
ATOM  9600 CA  TYR C 335    31.402 113.357 83.552 1.00 22.83       C
ATOM  9602 CB  TYR C 335    31.949 112.809 84.865 1.00 22.65       C
ATOM  9605 CG  TYR C 335    32.588 113.866 85.718 1.00 22.97       C
ATOM  9606 CD1 TYR C 335    31.911 114.398 86.810 1.00 23.06       C
ATOM  9608 CE1 TYR C 335    32.478 115.376 87.594 1.00 23.22       C
ATOM  9610 CZ  TYR C 335    33.735 115.843 87.302 1.00 23.50       C
ATOM  9611 OH  TYR C 335    34.268 116.818 88.104 1.00 24.32       O
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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 9613 | CE2 | TYR | C | 335 | 34.438 | 115.344 | 86.213 | 1.00 23.60 | C |
| ATOM | 9615 | CD2 | TYR | C | 335 | 33.858 | 114.357 | 85.424 | 1.00 23.11 | C |
| ATOM | 9617 | C | TYR | C | 335 | 30.753 | 112.217 | 82.773 | 1.00 22.97 | C |
| ATOM | 9618 | O | TYR | C | 335 | 29.795 | 111.596 | 83.236 | 1.00 22.91 | O |
| ATOM | 9619 | N | SER | C | 336 | 31.304 | 111.941 | 81.595 | 1.00 23.13 | N |
| ATOM | 9621 | CA | SER | C | 336 | 30.833 | 110.847 | 80.753 | 1.00 23.28 | C |
| ATOM | 9623 | CB | SER | C | 336 | 31.437 | 110.981 | 79.345 | 1.00 23.02 | C |
| ATOM | 9626 | OG | SER | C | 336 | 32.805 | 111.348 | 79.429 | 1.00 23.21 | O |
| ATOM | 9628 | C | SER | C | 336 | 31.196 | 109.478 | 81.359 | 1.00 23.45 | C |
| ATOM | 9629 | O | SER | C | 336 | 31.956 | 109.388 | 82.336 | 1.00 23.19 | O |
| ATOM | 9630 | N | LYS | C | 337 | 30.637 | 108.423 | 80.760 | 1.00 23.74 | N |
| ATOM | 9632 | CA | LYS | C | 337 | 31.026 | 107.034 | 81.040 | 1.00 23.61 | C |
| ATOM | 9634 | CB | LYS | C | 337 | 30.441 | 106.083 | 79.979 | 1.00 23.79 | C |
| ATOM | 9637 | CG | LYS | C | 337 | 29.359 | 105.144 | 80.487 | 1.00 24.13 | C |
| ATOM | 9640 | CD | LYS | C | 337 | 29.345 | 103.817 | 79.703 | 1.00 24.63 | C |
| ATOM | 9643 | CE | LYS | C | 337 | 28.100 | 102.979 | 80.036 | 1.00 25.18 | C |
| ATOM | 9646 | NZ | LYS | C | 337 | 27.208 | 102.758 | 78.848 | 1.00 24.94 | N |
| ATOM | 9650 | C | LYS | C | 337 | 32.543 | 106.862 | 81.036 | 1.00 23.58 | C |
| ATOM | 9651 | O | LYS | C | 337 | 33.095 | 106.269 | 81.966 | 1.00 23.45 | O |
| ATOM | 9652 | N | ASP | C | 338 | 33.195 | 107.376 | 79.984 | 1.00 23.31 | N |
| ATOM | 9654 | CA | ASP | C | 338 | 34.643 | 107.216 | 79.791 | 1.00 23.46 | C |
| ATOM | 9656 | CB | ASP | C | 338 | 35.028 | 107.408 | 78.310 | 1.00 23.48 | C |
| ATOM | 9659 | CG | ASP | C | 338 | 34.563 | 106.254 | 77.431 | 1.00 23.50 | C |
| ATOM | 9660 | OD1 | ASP | C | 338 | 35.353 | 105.798 | 76.567 | 1.00 23.44 | O |
| ATOM | 9661 | OD2 | ASP | C | 338 | 33.425 | 105.740 | 77.531 | 1.00 23.90 | O |
| ATOM | 9662 | C | ASP | C | 338 | 35.490 | 108.156 | 80.658 | 1.00 23.45 | C |
| ATOM | 9663 | O | ASP | C | 338 | 36.650 | 107.852 | 80.933 | 1.00 23.52 | O |
| ATOM | 9664 | N | ASP | C | 339 | 34.929 | 109.297 | 81.064 | 1.00 23.40 | N |
| ATOM | 9666 | CA | ASP | C | 339 | 35.602 | 110.193 | 82.014 | 1.00 23.46 | C |
| ATOM | 9668 | CB | ASP | C | 339 | 34.784 | 111.473 | 82.260 | 1.00 23.37 | C |
| ATOM | 9671 | CG | ASP | C | 339 | 35.130 | 112.612 | 81.294 | 1.00 23.23 | C |
| ATOM | 9672 | OD1 | ASP | C | 339 | 36.252 | 112.652 | 80.734 | 1.00 22.17 | O |
| ATOM | 9673 | OD2 | ASP | C | 339 | 34.322 | 113.536 | 81.054 | 1.00 22.90 | O |
| ATOM | 9674 | C | ASP | C | 339 | 35.854 | 109.473 | 83.350 | 1.00 23.65 | C |
| ATOM | 9675 | O | ASP | C | 339 | 36.789 | 109.823 | 84.083 | 1.00 23.64 | O |
| ATOM | 9676 | N | PHE | C | 340 | 35.010 | 108.483 | 83.663 | 1.00 23.87 | N |
| ATOM | 9678 | CA | PHE | C | 340 | 35.214 | 107.611 | 84.826 | 1.00 24.06 | C |
| ATOM | 9680 | CB | PHE | C | 340 | 33.959 | 106.770 | 85.115 | 1.00 24.12 | C |
| ATOM | 9683 | CG | PHE | C | 340 | 32.889 | 107.498 | 85.895 | 1.00 24.96 | C |
| ATOM | 9684 | CD1 | PHE | C | 340 | 32.208 | 108.569 | 85.336 | 1.00 25.77 | C |
| ATOM | 9686 | CE1 | PHE | C | 340 | 31.219 | 109.238 | 86.043 | 1.00 26.02 | C |
| ATOM | 9688 | CZ | PHE | C | 340 | 30.895 | 108.832 | 87.325 | 1.00 26.79 | C |
| ATOM | 9690 | CE2 | PHE | C | 340 | 31.558 | 107.754 | 87.898 | 1.00 26.79 | C |
| ATOM | 9692 | CD2 | PHE | C | 340 | 32.549 | 107.095 | 87.184 | 1.00 25.85 | C |
| ATOM | 9694 | C | PHE | C | 340 | 36.405 | 106.676 | 84.595 | 1.00 23.95 | C |
| ATOM | 9695 | O | PHE | C | 340 | 37.273 | 106.540 | 85.461 | 1.00 23.70 | O |
| ATOM | 9696 | N | HIS | C | 341 | 36.443 | 106.031 | 83.428 | 1.00 24.03 | N |
| ATOM | 9698 | CA | HIS | C | 341 | 37.529 | 105.098 | 83.113 | 1.00 24.10 | C |

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ATOM   9700 CB  HIS C 341     37.295 104.356 81.795 1.00 23.79        C
ATOM   9703 CG  HIS C 341     38.254 103.225 81.578 1.00 23.96        C
ATOM   9704 ND1 HIS C 341     38.295 102.118 82.399 1.00 23.93        N
ATOM   9706 CE1 HIS C 341     39.245 101.298 81.982 1.00 23.56        C
ATOM   9708 NE2 HIS C 341     39.828 101.837 80.927 1.00 23.39        N
ATOM   9710 CD2 HIS C 341     39.233 103.046 80.657 1.00 23.74        C
ATOM   9712 C   HIS C 341     38.890 105.781 83.078 1.00 24.20        C
ATOM   9713 O   HIS C 341     39.891 105.167 83.442 1.00 24.22        O
ATOM   9714 N   ARG C 342     38.917 107.050 82.665 1.00 24.50        N
ATOM   9716 CA  ARG C 342     40.166 107.816 82.544 1.00 24.78        C
ATOM   9718 CB  ARG C 342     39.954 109.101 81.726 1.00 24.75        C
ATOM   9721 CG  ARG C 342     39.982 108.917 80.211 1.00 24.30        C
ATOM   9724 CD  ARG C 342     39.065 109.885 79.471 1.00 23.88        C
ATOM   9727 NE  ARG C 342     39.099 109.706 78.021 1.00 23.45        N
ATOM   9729 CZ  ARG C 342     38.260 110.288 77.164 1.00 23.05        C
ATOM   9730 NH1 ARG C 342     37.302 111.102 77.594 1.00 22.76        N
ATOM   9733 NH2 ARG C 342     38.383 110.057 75.862 1.00 23.21        N
ATOM   9736 C   ARG C 342     40.753 108.175 83.910 1.00 25.03        C
ATOM   9737 O   ARG C 342     41.938 108.496 84.014 1.00 25.19        O
ATOM   9738 N   ALA C 343     39.917 108.130 84.944 1.00 25.28        N
ATOM   9740 CA  ALA C 343     40.357 108.321 86.320 1.00 25.56        C
ATOM   9742 CB  ALA C 343     39.257 109.015 87.120 1.00 25.51        C
ATOM   9746 C   ALA C 343     40.747 106.999 86.993 1.00 25.82        C
ATOM   9747 O   ALA C 343     40.608 106.857 88.212 1.00 26.03        O
ATOM   9748 N   GLY C 344     41.221 106.037 86.201 1.00 26.08        N
ATOM   9750 CA  GLY C 344     41.775 104.797 86.716 1.00 26.38        C
ATOM   9753 C   GLY C 344     40.829 103.917 87.507 1.00 26.78        C
ATOM   9754 O   GLY C 344     41.222 103.369 88.538 1.00 26.80        O
ATOM   9755 N   LEU C 345     39.592 103.773 87.031 1.00 27.25        N
ATOM   9757 CA  LEU C 345     38.594 102.943 87.714 1.00 27.42        C
ATOM   9759 CB  LEU C 345     37.308 103.747 87.978 1.00 27.41        C
ATOM   9762 CG  LEU C 345     37.328 104.711 89.177 1.00 26.98        C
ATOM   9764 CD1 LEU C 345     36.274 105.799 89.030 1.00 26.10        C
ATOM   9768 CD2 LEU C 345     37.140 103.971 90.492 1.00 26.81        C
ATOM   9772 C   LEU C 345     38.284 101.657 86.926 1.00 27.76        C
ATOM   9773 O   LEU C 345     38.452 101.599 85.698 1.00 27.59        O
ATOM   9774 N   GLN C 346     37.837 100.634 87.658 1.00 28.16        N
ATOM   9776 CA  GLN C 346     37.475 99.338 87.079 1.00 28.44        C
ATOM   9778 CB  GLN C 346     37.215 98.310 88.194 1.00 28.43        C
ATOM   9781 CG  GLN C 346     38.477 97.832 88.925 1.00 28.46        C
ATOM   9784 CD  GLN C 346     38.727 96.329 88.789 1.00 28.15        C
ATOM   9785 OE1 GLN C 346     39.805 95.913 88.365 1.00 27.00        O
ATOM   9786 NE2 GLN C 346     37.737 95.520 89.162 1.00 28.11        N
ATOM   9789 C   GLN C 346     36.231 99.444 86.191 1.00 28.67        C
ATOM   9790 O   GLN C 346     35.299 100.192 86.515 1.00 28.63        O
ATOM   9791 N   VAL C 347     36.219 98.682 85.092 1.00 28.72        N
ATOM   9793 CA  VAL C 347     35.083 98.646 84.158 1.00 28.88        C
ATOM   9795 CB  VAL C 347     35.492 98.051 82.777 1.00 29.00        C
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ATOM  9797 CG1 VAL C 347    34.313  98.048  81.802  1.00 29.19        C
ATOM  9801 CG2 VAL C 347    36.670  98.827  82.176  1.00 29.10        C
ATOM  9805 C   VAL C 347    33.877  97.867  84.727  1.00 28.99        C
ATOM  9806 O   VAL C 347    32.736  98.129  84.343  1.00 29.22        O
ATOM  9807 N   GLU C 348    34.130  96.934  85.651  1.00 28.89        N
ATOM  9809 CA  GLU C 348    33.065  96.155  86.308  1.00 28.48        C
ATOM  9811 CB  GLU C 348    33.578  94.767  86.710  1.00 28.54        C
ATOM  9814 CG  GLU C 348    34.222  93.980  85.571  1.00 28.57        C
ATOM  9817 CD  GLU C 348    35.728  94.160  85.486  1.00 28.72        C
ATOM  9818 OE1 GLU C 348    36.268  94.124  84.357  1.00 29.57        O
ATOM  9819 OE2 GLU C 348    36.380  94.334  86.539  1.00 28.83        O
ATOM  9820 C   GLU C 348    32.522  96.876  87.539  1.00 28.22        C
ATOM  9821 O   GLU C 348    31.654  96.355  88.247  1.00 27.96        O
ATOM  9822 N   PHE C 349    33.072  98.061  87.798  1.00 27.96        N
ATOM  9824 CA  PHE C 349    32.557  98.996  88.794  1.00 27.71        C
ATOM  9826 CB  PHE C 349    33.742  99.553  89.609  1.00 27.74        C
ATOM  9829 CG  PHE C 349    33.367 100.516  90.725  1.00 28.59        C
ATOM  9830 CD1 PHE C 349    32.140 100.457  91.374  1.00 29.06        C
ATOM  9832 CE1 PHE C 349    31.840 101.349  92.399  1.00 29.59        C
ATOM  9834 CZ  PHE C 349    32.769 102.301  92.796  1.00 29.26        C
ATOM  9836 CE2 PHE C 349    33.989 102.363  92.172  1.00 28.66        C
ATOM  9838 CD2 PHE C 349    34.288 101.475  91.146  1.00 29.12        C
ATOM  9840 C   PHE C 349    31.744 100.113  88.096  1.00 27.25        C
ATOM  9841 O   PHE C 349    30.771 100.601  88.659  1.00 27.59        O
ATOM  9842 N   ILE C 350    32.122 100.489  86.867  1.00 26.78        N
ATOM  9844 CA  ILE C 350    31.445 101.562  86.110  1.00 26.20        C
ATOM  9846 CB  ILE C 350    32.420 102.239  85.091  1.00 26.26        C
ATOM  9848 CG1 ILE C 350    33.592 102.924  85.802  1.00 26.42        C
ATOM  9851 CD1 ILE C 350    34.836 103.084  84.904  1.00 26.70        C
ATOM  9855 CG2 ILE C 350    31.689 103.269  84.207  1.00 26.08        C
ATOM  9859 C   ILE C 350    30.196 101.088  85.354  1.00 25.72        C
ATOM  9860 O   ILE C 350    29.230 101.832  85.247  1.00 25.62        O
ATOM  9861 N   ASN C 351    30.219  99.875  84.809  1.00 25.21        N
ATOM  9863 CA  ASN C 351    29.082  99.374  84.035  1.00 24.96        C
ATOM  9865 CB  ASN C 351    29.422  98.057  83.322  1.00 24.86        C
ATOM  9868 CG  ASN C 351    30.401  98.245  82.153  1.00 25.77        C
ATOM  9869 OD1 ASN C 351    30.457  99.308  81.523  1.00 26.02        O
ATOM  9870 ND2 ASN C 351    31.172  97.198  81.858  1.00 25.78        N
ATOM  9873 C   ASN C 351    27.792  99.233  84.867  1.00 24.70        C
ATOM  9874 O   ASN C 351    26.760  99.768  84.466  1.00 24.83        O
ATOM  9875 N   PRO C 352    27.828  98.551  86.016  1.00 24.16        N
ATOM  9876 CA  PRO C 352    26.598  98.339  86.802  1.00 24.18        C
ATOM  9878 CB  PRO C 352    27.060  97.425  87.953  1.00 24.24        C
ATOM  9881 CG  PRO C 352    28.381  96.867  87.501  1.00 24.24        C
ATOM  9884 CD  PRO C 352    28.999  97.944  86.671  1.00 23.97        C
ATOM  9887 C   PRO C 352    25.968  99.622  87.364  1.00 24.01        C
ATOM  9888 O   PRO C 352    24.755  99.639  87.565  1.00 23.97        O
ATOM  9889 N   ILE C 353    26.781 100.653  87.615  1.00 23.70        N
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ATOM   9891  CA  ILE C 353    26.306 101.938 88.134 1.00 23.36        C
ATOM   9893  CB  ILE C 353    27.495 102.793 88.656 1.00 23.41        C
ATOM   9895  CG1 ILE C 353    28.178 102.106 89.842 1.00 23.42        C
ATOM   9898  CD1 ILE C 353    29.420 102.820 90.337 1.00 23.49        C
ATOM   9902  CG2 ILE C 353    27.015 104.190 89.075 1.00 23.20        C
ATOM   9906  C   ILE C 353    25.537 102.735 87.079 1.00 23.29        C
ATOM   9907  O   ILE C 353    24.577 103.439 87.401 1.00 22.97        O
ATOM   9908  N   PHE C 354    25.985 102.660 85.827 1.00 23.02        N
ATOM   9910  CA  PHE C 354    25.286 103.334 84.732 1.00 22.96        C
ATOM   9912  CB  PHE C 354    26.198 103.508 83.517 1.00 23.12        C
ATOM   9915  CG  PHE C 354    26.964 104.811 83.514 1.00 23.93        C
ATOM   9916  CD1 PHE C 354    28.159 104.934 84.208 1.00 24.40        C
ATOM   9918  CE1 PHE C 354    28.874 106.126 84.193 1.00 24.30        C
ATOM   9920  CZ  PHE C 354    28.397 107.209 83.491 1.00 24.43        C
ATOM   9922  CE2 PHE C 354    27.207 107.105 82.786 1.00 24.83        C
ATOM   9924  CD2 PHE C 354    26.496 105.909 82.801 1.00 24.84        C
ATOM   9926  C   PHE C 354    24.012 102.575 84.350 1.00 22.50        C
ATOM   9927  O   PHE C 354    23.036 103.176 83.899 1.00 22.50        O
ATOM   9928  N   GLU C 355    24.031 101.259 84.533 1.00 22.02        N
ATOM   9930  CA  GLU C 355    22.836 100.434 84.373 1.00 21.74        C
ATOM   9932  CB  GLU C 355    23.196 98.932 84.395 1.00 21.83        C
ATOM   9935  CG  GLU C 355    22.744 98.125 83.179 1.00 22.57        C
ATOM   9938  CD  GLU C 355    23.799 97.115 82.705 1.00 23.44        C
ATOM   9939  OE1 GLU C 355    23.969 96.928 81.475 1.00 22.50        O
ATOM   9940  OE2 GLU C 355    24.463 96.502 83.572 1.00 24.23        O
ATOM   9941  C   GLU C 355    21.859 100.768 85.511 1.00 21.11        C
ATOM   9942  O   GLU C 355    20.646 100.851 85.307 1.00 20.86        O
ATOM   9943  N   PHE C 356    22.384 100.975 86.711 1.00 20.31        N
ATOM   9945  CA  PHE C 356    21.511 101.303 87.837 1.00 20.11        C
ATOM   9947  CB  PHE C 356    22.258 101.311 89.169 1.00 19.71        C
ATOM   9950  CG  PHE C 356    21.360 101.575 90.347 1.00 20.79        C
ATOM   9951  CD1 PHE C 356    20.447 100.614 90.760 1.00 21.75        C
ATOM   9953  CE1 PHE C 356    19.605 100.844 91.826 1.00 21.97        C
ATOM   9955  CZ  PHE C 356    19.654 102.071 92.490 1.00 23.12        C
ATOM   9957  CE2 PHE C 356    20.554 103.049 92.067 1.00 21.68        C
ATOM   9959  CD2 PHE C 356    21.390 102.797 91.004 1.00 20.58        C
ATOM   9961  C   PHE C 356    20.895 102.668 87.573 1.00 19.69        C
ATOM   9962  O   PHE C 356    19.650 102.846 87.643 1.00 19.08        O
ATOM   9963  N   SER C 357    21.787 103.607 87.227 1.00 19.64        N
ATOM   9965  CA  SER C 357    21.411 104.972 86.894 1.00 19.63        C
ATOM   9967  CB  SER C 357    22.623 105.755 86.374 1.00 19.47        C
ATOM   9970  OG  SER C 357    23.513 106.106 87.417 1.00 18.07        O
ATOM   9972  C   SER C 357    20.295 105.020 85.862 1.00 19.99        C
ATOM   9973  O   SER C 357    19.307 105.729 86.049 1.00 20.17        O
ATOM   9974  N   ARG C 358    20.430 104.253 84.793 1.00 20.29        N
ATOM   9976  CA  ARG C 358    19.464 104.344 83.714 1.00 21.21        C
ATOM   9978  CB  ARG C 358    20.103 103.971 82.360 1.00 21.36        C
ATOM   9981  CG  ARG C 358    19.989 102.525 81.901 1.00 23.32        C
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| ATOM | 9984 | CD | ARG C 358 | 20.690 102.292 80.555 1.00 24.66 | C |
|---|---|---|---|---|---|
| ATOM | 9987 | NE | ARG C 358 | 22.088 102.751 80.620 1.00 26.32 | N |
| ATOM | 9989 | CZ | ARG C 358 | 23.159 101.977 80.935 1.00 28.56 | C |
| ATOM | 9990 | NH1 | ARG C 358 | 23.022 100.674 81.205 1.00 28.88 | N |
| ATOM | 9993 | NH2 | ARG C 358 | 24.385 102.515 80.950 1.00 29.96 | N |
| ATOM | 9996 | C | ARG C 358 | 18.184 103.566 84.037 1.00 21.24 | C |
| ATOM | 9997 | O | ARG C 358 | 17.101 103.910 83.556 1.00 21.87 | O |
| ATOM | 9998 | N | ALA C 359 | 18.303 102.525 84.852 1.00 21.25 | N |
| ATOM | 10000 | CA | ALA C 359 | 17.129 101.770 85.276 1.00 21.64 | C |
| ATOM | 10002 | CB | ALA C 359 | 17.522 100.456 85.927 1.00 21.55 | C |
| ATOM | 10006 | C | ALA C 359 | 16.279 102.622 86.216 1.00 22.35 | C |
| ATOM | 10007 | O | ALA C 359 | 15.056 102.459 86.276 1.00 22.40 | O |
| ATOM | 10008 | N | MET C 360 | 16.922 103.553 86.923 1.00 22.66 | N |
| ATOM | 10010 | CA | MET C 360 | 16.197 104.555 87.684 1.00 23.32 | C |
| ATOM | 10012 | CB | MET C 360 | 17.137 105.295 88.638 1.00 23.88 | C |
| ATOM | 10015 | CG | MET C 360 | 17.731 104.413 89.741 1.00 24.60 | C |
| ATOM | 10018 | SD | MET C 360 | 16.721 104.377 91.213 1.00 30.15 | S |
| ATOM | 10019 | CE | MET C 360 | 15.846 102.995 90.912 1.00 29.26 | C |
| ATOM | 10023 | C | MET C 360 | 15.432 105.560 86.807 1.00 23.56 | C |
| ATOM | 10024 | O | MET C 360 | 14.338 105.997 87.188 1.00 23.48 | O |
| ATOM | 10025 | N | ARG C 361 | 15.969 105.915 85.638 1.00 23.81 | N |
| ATOM | 10027 | CA | ARG C 361 | 15.280 106.879 84.783 1.00 24.20 | C |
| ATOM | 10029 | CB | ARG C 361 | 16.148 107.326 83.573 1.00 24.79 | C |
| ATOM | 10032 | CG | ARG C 361 | 16.187 108.860 83.365 1.00 26.92 | C |
| ATOM | 10035 | CD | ARG C 361 | 16.661 109.654 84.627 1.00 30.24 | C |
| ATOM | 10038 | NE | ARG C 361 | 16.053 110.989 84.746 1.00 32.03 | N |
| ATOM | 10040 | CZ | ARG C 361 | 15.969 111.706 85.873 1.00 33.99 | C |
| ATOM | 10041 | NH1 | ARG C 361 | 16.430 111.247 87.049 1.00 34.23 | N |
| ATOM | 10044 | NH2 | ARG C 361 | 15.403 112.908 85.822 1.00 35.68 | N |
| ATOM | 10047 | C | ARG C 361 | 13.925 106.338 84.330 1.00 23.86 | C |
| ATOM | 10048 | O | ARG C 361 | 12.911 107.069 84.382 1.00 24.38 | O |
| ATOM | 10049 | N | ARG C 362 | 13.915 105.071 83.894 1.00 23.50 | N |
| ATOM | 10051 | CA | ARG C 362 | 12.695 104.382 83.440 1.00 23.22 | C |
| ATOM | 10053 | CB | ARG C 362 | 12.951 102.874 83.279 1.00 23.37 | C |
| ATOM | 10056 | CG | ARG C 362 | 13.918 102.464 82.151 1.00 23.80 | C |
| ATOM | 10059 | CD | ARG C 362 | 14.507 101.050 82.314 1.00 24.20 | C |
| ATOM | 10062 | NE | ARG C 362 | 15.603 100.809 81.370 1.00 25.42 | N |
| ATOM | 10064 | CZ | ARG C 362 | 16.711 100.111 81.628 1.00 25.11 | C |
| ATOM | 10065 | NH1 | ARG C 362 | 16.901 99.536 82.814 1.00 24.28 | N |
| ATOM | 10068 | NH2 | ARG C 362 | 17.636 99.970 80.671 1.00 25.33 | N |
| ATOM | 10071 | C | ARG C 362 | 11.561 104.570 84.441 1.00 22.97 | C |
| ATOM | 10072 | O | ARG C 362 | 10.385 104.646 84.081 1.00 22.22 | O |
| ATOM | 10073 | N | LEU C 363 | 11.948 104.613 85.715 1.00 23.48 | N |
| ATOM | 10075 | CA | LEU C 363 | 11.016 104.763 86.832 1.00 23.40 | C |
| ATOM | 10077 | CB | LEU C 363 | 11.645 104.253 88.116 1.00 23.65 | C |
| ATOM | 10080 | CG | LEU C 363 | 11.589 102.738 88.298 1.00 24.41 | C |
| ATOM | 10082 | CD1 | LEU C 363 | 12.171 102.414 89.650 1.00 24.85 | C |
| ATOM | 10086 | CD2 | LEU C 363 | 10.165 102.205 88.181 1.00 24.58 | C |

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ATOM 10090 C   LEU C 363    10.530 106.192 87.027 1.00 23.05        C
ATOM 10091 O   LEU C 363     9.377 106.412 87.419 1.00 23.00        O
ATOM 10092 N   GLY C 364    11.410 107.151 86.741 1.00 22.83        N
ATOM 10094 CA  GLY C 364    11.008 108.534 86.499 1.00 22.35        C
ATOM 10097 C   GLY C 364    10.641 109.217 87.783 1.00 21.76        C
ATOM 10098 O   GLY C 364     9.658 109.951 87.864 1.00 21.26        O
ATOM 10099 N   LEU C 365    11.455 108.959 88.793 1.00 21.51        N
ATOM 10101 CA  LEU C 365    11.234 109.519 90.114 1.00 21.03        C
ATOM 10103 CB  LEU C 365    12.143 108.865 91.144 1.00 20.65        C
ATOM 10106 CG  LEU C 365    12.368 107.358 91.122 1.00 21.08        C
ATOM 10108 CD1 LEU C 365    13.044 107.004 92.460 1.00 22.02        C
ATOM 10112 CD2 LEU C 365    11.079 106.571 90.916 1.00 20.54        C
ATOM 10116 C   LEU C 365    11.503 111.016 90.102 1.00 20.73        C
ATOM 10117 O   LEU C 365    12.407 111.484 89.409 1.00 21.32        O
ATOM 10118 N   ASP C 366    10.714 111.757 90.871 1.00 20.00        N
ATOM 10120 CA  ASP C 366    10.991 113.161 91.132 1.00 19.45        C
ATOM 10122 CB  ASP C 366     9.697 113.977 91.126 1.00 19.28        C
ATOM 10125 CG  ASP C 366     8.683 113.455 92.098 1.00 19.71        C
ATOM 10126 OD1 ASP C 366     9.092 113.087 93.215 1.00 21.40        O
ATOM 10127 OD2 ASP C 366     7.470 113.348 91.844 1.00 19.87        O
ATOM 10128 C   ASP C 366    11.720 113.268 92.476 1.00 19.07        C
ATOM 10129 O   ASP C 366    12.003 112.263 93.125 1.00 19.27        O
ATOM 10130 N   ASP C 367    12.015 114.488 92.884 1.00 18.72        N
ATOM 10132 CA  ASP C 367    12.764 114.758 94.119 1.00 18.83        C
ATOM 10134 CB  ASP C 367    12.997 116.278 94.260 1.00 19.03        C
ATOM 10137 CG  ASP C 367    13.933 116.818 93.184 1.00 20.37        C
ATOM 10138 OD1 ASP C 367    14.541 115.992 92.456 1.00 22.82        O
ATOM 10139 OD2 ASP C 367    14.127 118.034 92.998 1.00 22.97        O
ATOM 10140 C   ASP C 367    12.137 114.198 95.393 1.00 17.53        C
ATOM 10141 O   ASP C 367    12.831 113.657 96.236 1.00 17.54        O
ATOM 10142 N   ALA C 368    10.825 114.317 95.499 1.00 16.37        N
ATOM 10144 CA  ALA C 368    10.087 113.797 96.622 1.00 15.67        C
ATOM 10146 CB  ALA C 368     8.605 114.125 96.454 1.00 15.18        C
ATOM 10150 C   ALA C 368    10.308 112.280 96.767 1.00 15.68        C
ATOM 10151 O   ALA C 368    10.513 111.774 97.878 1.00 14.84        O
ATOM 10152 N   GLU C 369    10.266 111.583 95.628 1.00 15.85        N
ATOM 10154 CA  GLU C 369    10.353 110.128 95.561 1.00 16.13        C
ATOM 10156 CB  GLU C 369     9.860 109.624 94.217 1.00 16.06        C
ATOM 10159 CG  GLU C 369     8.374 109.828 94.055 1.00 17.12        C
ATOM 10162 CD  GLU C 369     7.877 109.577 92.647 1.00 18.03        C
ATOM 10163 OE1 GLU C 369     6.866 108.884 92.536 1.00 20.82        O
ATOM 10164 OE2 GLU C 369     8.469 110.052 91.656 1.00 18.31        O
ATOM 10165 C   GLU C 369    11.744 109.594 95.836 1.00 16.23        C
ATOM 10166 O   GLU C 369    11.886 108.550 96.445 1.00 16.69        O
ATOM 10167 N   TYR C 370    12.762 110.314 95.404 1.00 16.55        N
ATOM 10169 CA  TYR C 370    14.145 109.957 95.744 1.00 16.91        C
ATOM 10171 CB  TYR C 370    15.126 110.805 94.935 1.00 16.93        C
ATOM 10174 CG  TYR C 370    15.577 110.198 93.646 1.00 17.84        C
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ATOM 10175 CD1 TYR C 370    15.126 110.684  92.413  1.00 19.06        C
ATOM 10177 CE1 TYR C 370    15.579 110.119  91.207  1.00 19.31        C
ATOM 10179 CZ  TYR C 370    16.484 109.067  91.247  1.00 19.58        C
ATOM 10180 OH  TYR C 370    16.966 108.484  90.093  1.00 22.52        O
ATOM 10182 CE2 TYR C 370    16.933 108.582  92.454  1.00 20.02        C
ATOM 10184 CD2 TYR C 370    16.489 109.153  93.645  1.00 19.34        C
ATOM 10186 C   TYR C 370    14.405 110.209  97.224  1.00 16.75        C
ATOM 10187 O   TYR C 370    15.209 109.536  97.854  1.00 16.88        O
ATOM 10188 N   ALA C 371    13.735 111.213  97.759  1.00 16.99        N
ATOM 10190 CA  ALA C 371    13.937 111.635  99.145  1.00 17.27        C
ATOM 10192 CB  ALA C 371    13.291 112.993  99.374  1.00 17.08        C
ATOM 10196 C   ALA C 371    13.335 110.567 100.051  1.00 16.84        C
ATOM 10197 O   ALA C 371    13.988 110.073 100.932  1.00 16.85        O
ATOM 10198 N   LEU C 372    12.102 110.181  99.753  1.00 17.01        N
ATOM 10200 CA  LEU C 372    11.404 109.117 100.441  1.00 17.09        C
ATOM 10202 CB  LEU C 372     9.970 108.972  99.929  1.00 17.59        C
ATOM 10205 CG  LEU C 372     9.044 110.149 100.313  1.00 17.05        C
ATOM 10207 CD1 LEU C 372     7.889 110.186  99.401  1.00 16.74        C
ATOM 10211 CD2 LEU C 372     8.559 109.988 101.719  1.00 16.75        C
ATOM 10215 C   LEU C 372    12.074 107.789 100.327  1.00 17.40        C
ATOM 10216 O   LEU C 372    12.039 107.043 101.283  1.00 18.12        O
ATOM 10217 N   LEU C 373    12.664 107.465  99.176  1.00 17.55        N
ATOM 10219 CA  LEU C 373    13.380 106.194  99.021  1.00 17.11        C
ATOM 10221 CB  LEU C 373    13.757 105.902  97.556  1.00 17.61        C
ATOM 10224 CG  LEU C 373    12.821 104.978  96.754  1.00 19.97        C
ATOM 10226 CD1 LEU C 373    13.294 104.804  95.293  1.00 20.70        C
ATOM 10230 CD2 LEU C 373    12.685 103.626  97.424  1.00 20.60        C
ATOM 10234 C   LEU C 373    14.634 106.211  99.872  1.00 16.04        C
ATOM 10235 O   LEU C 373    15.007 105.210 100.453  1.00 15.69        O
ATOM 10236 N   ILE C 374    15.286 107.356  99.934  1.00 15.15        N
ATOM 10238 CA  ILE C 374    16.471 107.496 100.747  1.00 14.92        C
ATOM 10240 CB  ILE C 374    17.107 108.871 100.509  1.00 14.52        C
ATOM 10242 CG1 ILE C 374    17.863 108.868  99.174  1.00 13.50        C
ATOM 10245 CD1 ILE C 374    18.178 110.229  98.652  1.00 14.08        C
ATOM 10249 CG2 ILE C 374    18.094 109.237 101.625  1.00 15.97        C
ATOM 10253 C   ILE C 374    16.148 107.247 102.242  1.00 15.39        C
ATOM 10254 O   ILE C 374    16.804 106.436 102.899  1.00 14.33        O
ATOM 10255 N   ALA C 375    15.139 107.940 102.759  1.00 15.76        N
ATOM 10257 CA  ALA C 375    14.701 107.752 104.144  1.00 16.21        C
ATOM 10259 CB  ALA C 375    13.529 108.715 104.488  1.00 16.50        C
ATOM 10263 C   ALA C 375    14.301 106.315 104.430  1.00 16.30        C
ATOM 10264 O   ALA C 375    14.640 105.778 105.504  1.00 16.83        O
ATOM 10265 N   ILE C 376    13.603 105.675 103.487  1.00 16.26        N
ATOM 10267 CA  ILE C 376    13.248 104.260 103.641  1.00 16.17        C
ATOM 10269 CB  ILE C 376    12.388 103.765 102.483  1.00 15.65        C
ATOM 10271 CG1 ILE C 376    10.962 104.324 102.577  1.00 14.92        C
ATOM 10274 CD1 ILE C 376    10.252 104.412 101.217  1.00 13.64        C
ATOM 10278 CG2 ILE C 376    12.311 102.230 102.478  1.00 15.37        C
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ATOM 10282 C   ILE C 376   14.512 103.389 103.749 1.00 17.06   C
ATOM 10283 O   ILE C 376   14.534 102.404 104.506 1.00 17.32   O
ATOM 10284 N   ASN C 377   15.543 103.744 102.976 1.00 17.57   N
ATOM 10286 CA  ASN C 377   16.820 103.013 102.968 1.00 17.73   C
ATOM 10288 CB  ASN C 377   17.752 103.496 101.848 1.00 17.99   C
ATOM 10291 CG  ASN C 377   18.896 102.520 101.578 1.00 19.82   C
ATOM 10292 OD1 ASN C 377   20.070 102.880 101.638 1.00 21.89   O
ATOM 10293 ND2 ASN C 377   18.552 101.269 101.319 1.00 21.75   N
ATOM 10296 C   ASN C 377   17.554 103.162 104.283 1.00 17.65   C
ATOM 10297 O   ASN C 377   18.123 102.204 104.772 1.00 17.41   O
ATOM 10298 N   ILE C 378   17.523 104.362 104.861 1.00 17.48   N
ATOM 10300 CA  ILE C 378   18.224 104.627 106.099 1.00 17.47   C
ATOM 10302 CB  ILE C 378   18.164 106.130 106.434 1.00 17.43   C
ATOM 10304 CG1 ILE C 378   18.964 106.953 105.415 1.00 18.45   C
ATOM 10307 CD1 ILE C 378   18.754 108.508 105.545 1.00 18.06   C
ATOM 10311 CG2 ILE C 378   18.768 106.411 107.814 1.00 18.61   C
ATOM 10315 C   ILE C 378   17.654 103.753 107.247 1.00 17.23   C
ATOM 10316 O   ILE C 378   18.400 103.188 108.018 1.00 16.66   O
ATOM 10317 N   PHE C 379   16.330 103.626 107.318 1.00 17.55   N
ATOM 10319 CA  PHE C 379   15.659 102.894 108.394 1.00 17.18   C
ATOM 10321 CB  PHE C 379   14.332 103.566 108.741 1.00 16.99   C
ATOM 10324 CG  PHE C 379   14.489 104.973 109.255 1.00 16.94   C
ATOM 10325 CD1 PHE C 379   13.915 106.031 108.612 1.00 16.97   C
ATOM 10327 CE1 PHE C 379   14.085 107.298 109.074 1.00 15.85   C
ATOM 10329 CZ  PHE C 379   14.825 107.539 110.174 1.00 15.48   C
ATOM 10331 CE2 PHE C 379   15.408 106.515 110.832 1.00 16.69   C
ATOM 10333 CD2 PHE C 379   15.260 105.233 110.367 1.00 18.66   C
ATOM 10335 C   PHE C 379   15.431 101.445 108.028 1.00 17.81   C
ATOM 10336 O   PHE C 379   14.307 100.966 108.065 1.00 18.46   O
ATOM 10337 N   SER C 380   16.509 100.748 107.678 1.00 17.88   N
ATOM 10339 CA  SER C 380   16.485 99.310 107.441 1.00 17.98   C
ATOM 10341 CB  SER C 380   17.496 98.909 106.356 1.00 17.76   C
ATOM 10344 OG  SER C 380   17.303 99.647 105.163 1.00 16.61   O
ATOM 10346 C   SER C 380   16.903 98.662 108.728 1.00 18.11   C
ATOM 10347 O   SER C 380   17.982 98.947 109.228 1.00 18.24   O
ATOM 10348 N   ALA C 381   16.077 97.768 109.256 1.00 18.87   N
ATOM 10350 CA  ALA C 381   16.282 97.263 110.629 1.00 19.14   C
ATOM 10352 CB  ALA C 381   15.004 96.671 111.221 1.00 18.10   C
ATOM 10356 C   ALA C 381   17.374 96.227 110.613 1.00 19.86   C
ATOM 10357 O   ALA C 381   17.918 95.904 111.649 1.00 20.58   O
ATOM 10358 N   ASP C 382   17.720 95.740 109.426 1.00 20.78   N
ATOM 10360 CA  ASP C 382   18.578 94.574 109.308 1.00 21.80   C
ATOM 10362 CB  ASP C 382   18.049 93.631 108.217 1.00 22.59   C
ATOM 10365 CG  ASP C 382   17.712 94.340 106.924 1.00 25.32   C
ATOM 10366 OD1 ASP C 382   18.345 95.372 106.572 1.00 28.27   O
ATOM 10367 OD2 ASP C 382   16.800 93.907 106.184 1.00 31.03   O
ATOM 10368 C   ASP C 382   20.063 94.875 109.087 1.00 21.30   C
ATOM 10369 O   ASP C 382   20.850 93.961 108.880 1.00 21.67   O
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ATOM 10370 N   ARG C 383   20.464  96.133 109.158 1.00 20.76    N
ATOM 10372 CA  ARG C 383   21.870  96.458 108.966 1.00 20.40    C
ATOM 10374 CB  ARG C 383   22.102  97.968 108.964 1.00 20.24    C
ATOM 10377 CG  ARG C 383   21.280  98.721 107.973 1.00 20.86    C
ATOM 10380 CD  ARG C 383   21.471  98.305 106.512 1.00 20.81    C
ATOM 10383 NE  ARG C 383   21.060  99.411 105.651 1.00 23.05    N
ATOM 10385 CZ  ARG C 383   21.448  99.608 104.392 1.00 23.62    C
ATOM 10386 NH1 ARG C 383   22.284  98.767 103.791 1.00 22.88    N
ATOM 10389 NH2 ARG C 383   20.988 100.673 103.737 1.00 23.93    N
ATOM 10392 C   ARG C 383   22.705  95.828 110.072 1.00 20.60    C
ATOM 10393 O   ARG C 383   22.193  95.559 111.171 1.00 20.49    O
ATOM 10394 N   PRO C 384   23.990  95.591 109.791 1.00 20.64    N
ATOM 10395 CA  PRO C 384   24.900  95.098 110.820 1.00 20.23    C
ATOM 10397 CB  PRO C 384   26.252  95.045 110.100 1.00 20.42    C
ATOM 10400 CG  PRO C 384   25.906  94.926 108.642 1.00 20.49    C
ATOM 10403 CD  PRO C 384   24.675  95.752 108.487 1.00 20.78    C
ATOM 10406 C   PRO C 384   24.938  96.050 112.006 1.00 20.18    C
ATOM 10407 O   PRO C 384   24.774  97.273 111.839 1.00 20.56    O
ATOM 10408 N   ASN C 385   25.073  95.470 113.198 1.00 19.50    N
ATOM 10410 CA  ASN C 385   25.282  96.212 114.440 1.00 18.82    C
ATOM 10412 CB  ASN C 385   26.525  97.100 114.315 1.00 18.73    C
ATOM 10415 CG  ASN C 385   27.764  96.298 113.980 1.00 19.31    C
ATOM 10416 OD1 ASN C 385   28.111  95.354 114.686 1.00 18.15    O
ATOM 10417 ND2 ASN C 385   28.423  96.653 112.887 1.00 20.05    N
ATOM 10420 C   ASN C 385   24.105  97.015 114.988 1.00 17.94    C
ATOM 10421 O   ASN C 385   24.272  97.731 115.967 1.00 17.75    O
ATOM 10422 N   VAL C 386   22.920  96.870 114.404 1.00 17.31    N
ATOM 10424 CA  VAL C 386   21.746  97.617 114.863 1.00 16.98    C
ATOM 10426 CB  VAL C 386   20.583  97.561 113.834 1.00 16.96    C
ATOM 10428 CG1 VAL C 386   19.256  97.893 114.462 1.00 17.21    C
ATOM 10432 CG2 VAL C 386   20.843  98.519 112.699 1.00 16.77    C
ATOM 10436 C   VAL C 386   21.323  97.075 116.230 1.00 16.99    C
ATOM 10437 O   VAL C 386   21.182  95.869 116.411 1.00 16.69    O
ATOM 10438 N   GLN C 387   21.143  97.971 117.198 1.00 16.81    N
ATOM 10440 CA  GLN C 387   20.861  97.554 118.568 1.00 17.01    C
ATOM 10442 CB  GLN C 387   21.595  98.454 119.582 1.00 17.44    C
ATOM 10445 CG  GLN C 387   23.103  98.095 119.742 1.00 19.87    C
ATOM 10448 CD  GLN C 387   23.773  98.768 120.958 1.00 25.61    C
ATOM 10449 OE1 GLN C 387   23.707  98.247 122.088 1.00 28.07    O
ATOM 10450 NE2 GLN C 387   24.430  99.915 120.730 1.00 28.85    N
ATOM 10453 C   GLN C 387   19.351  97.492 118.800 1.00 16.32    C
ATOM 10454 O   GLN C 387   18.875  96.659 119.549 1.00 15.38    O
ATOM 10455 N   GLU C 388   18.594  98.331 118.095 1.00 16.53    N
ATOM 10457 CA  GLU C 388   17.144  98.385 118.264 1.00 16.09    C
ATOM 10459 CB  GLU C 388   16.764  99.681 118.965 1.00 16.06    C
ATOM 10462 CG  GLU C 388   17.286  99.703 120.404 1.00 18.42    C
ATOM 10465 CD  GLU C 388   16.865 100.927 121.208 1.00 18.48    C
ATOM 10466 OE1 GLU C 388   16.985 102.090 120.720 1.00 15.22    O
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ATOM 10467 OE2 GLU C 388    16.450 100.703 122.359  1.00 21.22    O
ATOM 10468 C   GLU C 388    16.430  98.210 116.930  1.00 15.40    C
ATOM 10469 O   GLU C 388    15.942  99.173 116.383  1.00 15.04    O
ATOM 10470 N   PRO C 389    16.403  96.981 116.390  1.00 15.72    N
ATOM 10471 CA  PRO C 389    15.651  96.688 115.150  1.00 15.71    C
ATOM 10473 CB  PRO C 389    15.727  95.164 115.032  1.00 15.89    C
ATOM 10476 CG  PRO C 389    16.318  94.659 116.329  1.00 14.99    C
ATOM 10479 CD  PRO C 389    17.120  95.788 116.882  1.00 15.27    C
ATOM 10482 C   PRO C 389    14.197  97.143 115.228  1.00 16.18    C
ATOM 10483 O   PRO C 389    13.704  97.776 114.307  1.00 15.95    O
ATOM 10484 N   GLY C 390    13.536  96.853 116.346  1.00 16.92    N
ATOM 10486 CA  GLY C 390    12.155  97.279 116.556  1.00 16.79    C
ATOM 10489 C   GLY C 390    11.889  98.750 116.344  1.00 17.11    C
ATOM 10490 O   GLY C 390    10.893  99.093 115.718  1.00 17.75    O
ATOM 10491 N   ARG C 391    12.745  99.629 116.878  1.00 17.66    N
ATOM 10493 CA  ARG C 391    12.592 101.082 116.655  1.00 18.13    C
ATOM 10495 CB  ARG C 391    13.614 101.934 117.413  1.00 18.77    C
ATOM 10498 CG  ARG C 391    13.675 101.810 118.857  1.00 24.55    C
ATOM 10501 CD  ARG C 391    14.683 102.805 119.477  1.00 29.16    C
ATOM 10504 NE  ARG C 391    14.076 104.107 119.567  1.00 31.78    N
ATOM 10506 CZ  ARG C 391    13.182 104.413 120.470  1.00 34.82    C
ATOM 10507 NH1 ARG C 391    12.835 103.520 121.392  1.00 36.74    N
ATOM 10510 NH2 ARG C 391    12.626 105.609 120.456  1.00 37.16    N
ATOM 10513 C   ARG C 391    12.818 101.466 115.210  1.00 16.18    C
ATOM 10514 O   ARG C 391    12.147 102.322 114.689  1.00 15.38    O
ATOM 10515 N   VAL C 392    13.847 100.894 114.606  1.00 15.70    N
ATOM 10517 CA  VAL C 392    14.229 101.269 113.247  1.00 15.66    C
ATOM 10519 CB  VAL C 392    15.553 100.608 112.817  1.00 15.19    C
ATOM 10521 CG1 VAL C 392    15.897 100.980 111.376  1.00 15.63    C
ATOM 10525 CG2 VAL C 392    16.687 101.041 113.724  1.00 14.28    C
ATOM 10529 C   VAL C 392    13.081 100.953 112.282  1.00 15.55    C
ATOM 10530 O   VAL C 392    12.685 101.791 111.480  1.00 14.85    O
ATOM 10531 N   GLU C 393    12.511  99.764 112.435  1.00 16.20    N
ATOM 10533 CA  GLU C 393    11.417  99.333 111.588  1.00 17.13    C
ATOM 10535 CB  GLU C 393    11.121  97.859 111.816  1.00 17.76    C
ATOM 10538 CG  GLU C 393     9.758  97.464 111.291  1.00 21.52    C
ATOM 10541 CD  GLU C 393     9.695  96.060 110.805  1.00 25.44    C
ATOM 10542 OE1 GLU C 393     9.791  95.881 109.555  1.00 28.53    O
ATOM 10543 OE2 GLU C 393     9.519  95.164 111.680  1.00 29.10    O
ATOM 10544 C   GLU C 393    10.142 100.173 111.759  1.00 16.73    C
ATOM 10545 O   GLU C 393     9.493 100.506 110.781  1.00 17.69    O
ATOM 10546 N   ALA C 394     9.775 100.498 112.984  1.00 15.86    N
ATOM 10548 CA  ALA C 394     8.653 101.398 113.245  1.00 15.54    C
ATOM 10550 CB  ALA C 394     8.404 101.526 114.760  1.00 15.28    C
ATOM 10554 C   ALA C 394     8.851 102.788 112.623  1.00 15.35    C
ATOM 10555 O   ALA C 394     7.879 103.395 112.117  1.00 14.06    O
ATOM 10556 N   LEU C 395    10.096 103.275 112.652  1.00 15.22    N
ATOM 10558 CA  LEU C 395    10.452 104.558 112.014  1.00 15.78    C
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ATOM 10560 CB  LEU C 395   11.852 104.992 112.420 1.00 15.68      C
ATOM 10563 CG  LEU C 395   11.918 105.480 113.861 1.00 16.97      C
ATOM 10565 CD1 LEU C 395   13.361 105.689 114.268 1.00 19.03      C
ATOM 10569 CD2 LEU C 395   11.107 106.770 114.058 1.00 18.08      C
ATOM 10573 C   LEU C 395   10.355 104.529 110.485 1.00 16.08      C
ATOM 10574 O   LEU C 395   10.014 105.516 109.859 1.00 16.06      O
ATOM 10575 N   GLN C 396   10.642 103.382 109.894 1.00 16.66      N
ATOM 10577 CA  GLN C 396   10.517 103.229 108.459 1.00 17.47      C
ATOM 10579 CB  GLN C 396   11.134 101.895 108.028 1.00 17.68      C
ATOM 10582 CG  GLN C 396   11.324 101.768 106.542 1.00 16.72      C
ATOM 10585 CD  GLN C 396   11.835 100.405 106.179 1.00 18.42      C
ATOM 10586 OE1 GLN C 396   11.147  99.393 106.369 1.00 18.27      O
ATOM 10587 NE2 GLN C 396   13.034 100.367 105.647 1.00 17.65      N
ATOM 10590 C   GLN C 396    9.072 103.279 107.956 1.00 17.63      C
ATOM 10591 O   GLN C 396    8.821 103.809 106.869 1.00 17.64      O
ATOM 10592 N   GLN C 397    8.149 102.710 108.724 1.00 17.50      N
ATOM 10594 CA  GLN C 397    6.740 102.654 108.344 1.00 18.27      C
ATOM 10596 CB  GLN C 397    5.859 102.191 109.506 1.00 19.03      C
ATOM 10599 CG  GLN C 397    4.431 101.773 109.037 1.00 23.38      C
ATOM 10602 CD  GLN C 397    3.449 101.459 110.189 1.00 26.76      C
ATOM 10603 OE1 GLN C 397    2.222 101.632 110.031 1.00 28.67      O
ATOM 10604 NE2 GLN C 397    3.983 100.997 111.327 1.00 26.27      N
ATOM 10607 C   GLN C 397    6.147 103.936 107.740 1.00 17.26      C
ATOM 10608 O   GLN C 397    5.620 103.884 106.635 1.00 17.45      O
ATOM 10609 N   PRO C 398    6.167 105.066 108.437 1.00 16.37      N
ATOM 10610 CA  PRO C 398    5.557 106.287 107.881 1.00 16.00      C
ATOM 10612 CB  PRO C 398    5.840 107.337 108.949 1.00 15.99      C
ATOM 10615 CG  PRO C 398    6.961 106.770 109.755 1.00 16.38      C
ATOM 10618 CD  PRO C 398    6.697 105.304 109.786 1.00 16.31      C
ATOM 10621 C   PRO C 398    6.135 106.722 106.530 1.00 15.98      C
ATOM 10622 O   PRO C 398    5.441 107.395 105.774 1.00 16.26      O
ATOM 10623 N   TYR C 399    7.381 106.359 106.237 1.00 15.50      N
ATOM 10625 CA  TYR C 399    8.010 106.723 104.975 1.00 15.01      C
ATOM 10627 CB  TYR C 399    9.546 106.768 105.104 1.00 14.45      C
ATOM 10630 CG  TYR C 399   10.020 107.922 106.008 1.00 14.13      C
ATOM 10631 CD1 TYR C 399   10.418 107.694 107.319 1.00 14.06      C
ATOM 10633 CE1 TYR C 399   10.834 108.727 108.141 1.00 15.10      C
ATOM 10635 CZ  TYR C 399   10.846 110.016 107.658 1.00 12.68      C
ATOM 10636 OH  TYR C 399   11.243 111.020 108.451 1.00 13.28      O
ATOM 10638 CE2 TYR C 399   10.444 110.281 106.386 1.00 14.91      C
ATOM 10640 CD2 TYR C 399   10.028 109.218 105.558 1.00 14.31      C
ATOM 10642 C   TYR C 399    7.542 105.801 103.869 1.00 15.21      C
ATOM 10643 O   TYR C 399    7.317 106.255 102.759 1.00 15.21      O
ATOM 10644 N   VAL C 400    7.391 104.519 104.175 1.00 15.84      N
ATOM 10646 CA  VAL C 400    6.772 103.571 103.248 1.00 16.94      C
ATOM 10648 CB  VAL C 400    6.834 102.110 103.743 1.00 16.80      C
ATOM 10650 CG1 VAL C 400    6.125 101.182 102.760 1.00 16.87      C
ATOM 10654 CG2 VAL C 400    8.278 101.667 103.916 1.00 17.11      C
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ATOM 10658 C   VAL C 400    5.319 103.962 102.969 1.00 17.15      C
ATOM 10659 O   VAL C 400    4.912 104.001 101.819 1.00 16.77      O
ATOM 10660 N   GLU C 401    4.562 104.267 104.023 1.00 18.06      N
ATOM 10662 CA  GLU C 401    3.176 104.751 103.875 1.00 18.84      C
ATOM 10664 CB  GLU C 401    2.551 105.092 105.240 1.00 19.09      C
ATOM 10667 CG  GLU C 401    1.929 103.886 105.935 1.00 21.89      C
ATOM 10670 CD  GLU C 401    1.442 104.153 107.356 1.00 24.70      C
ATOM 10671 OE1 GLU C 401    1.243 103.183 108.115 1.00 27.79      O
ATOM 10672 OE2 GLU C 401    1.260 105.318 107.732 1.00 28.43      O
ATOM 10673 C   GLU C 401    3.129 105.968 102.956 1.00 18.12      C
ATOM 10674 O   GLU C 401    2.367 106.001 102.007 1.00 17.39      O
ATOM 10675 N   ALA C 402    3.984 106.947 103.236 1.00 18.19      N
ATOM 10677 CA  ALA C 402    3.995 108.204 102.503 1.00 18.17      C
ATOM 10679 CB  ALA C 402    5.011 109.135 103.093 1.00 18.00      C
ATOM 10683 C   ALA C 402    4.270 107.995 101.005 1.00 18.61      C
ATOM 10684 O   ALA C 402    3.631 108.618 100.154 1.00 18.66      O
ATOM 10685 N   LEU C 403    5.213 107.114 100.694 1.00 18.75      N
ATOM 10687 CA  LEU C 403    5.619 106.879  99.321 1.00 19.05      C
ATOM 10689 CB  LEU C 403    6.997 106.192  99.275 1.00 19.15      C
ATOM 10692 CG  LEU C 403    7.513 105.797  97.878 1.00 18.67      C
ATOM 10694 CD1 LEU C 403    7.745 107.045  97.046 1.00 18.95      C
ATOM 10698 CD2 LEU C 403    8.780 104.956  97.957 1.00 16.47      C
ATOM 10702 C   LEU C 403    4.572 106.054  98.554 1.00 19.21      C
ATOM 10703 O   LEU C 403    4.393 106.234  97.342 1.00 18.82      O
ATOM 10704 N   LEU C 404    3.910 105.140  99.253 1.00 19.19      N
ATOM 10706 CA  LEU C 404    2.799 104.395  98.684 1.00 19.67      C
ATOM 10708 CB  LEU C 404    2.269 103.363  99.684 1.00 19.97      C
ATOM 10711 CG  LEU C 404    1.005 102.569  99.318 1.00 20.24      C
ATOM 10713 CD1 LEU C 404    1.185 101.863  98.014 1.00 21.39      C
ATOM 10717 CD2 LEU C 404    0.696 101.557 100.381 1.00 20.47      C
ATOM 10721 C   LEU C 404    1.700 105.372  98.302 1.00 19.98      C
ATOM 10722 O   LEU C 404    1.176 105.328  97.187 1.00 20.57      O
ATOM 10723 N   SER C 405    1.372 106.259  99.235 1.00 20.27      N
ATOM 10725 CA  SER C 405    0.396 107.334  99.022 1.00 20.15      C
ATOM 10727 CB  SER C 405    0.272 108.202 100.288 1.00 20.21      C
ATOM 10730 OG  SER C 405   -0.915 107.924 100.983 1.00 20.15      O
ATOM 10732 C   SER C 405    0.790 108.248  97.880 1.00 20.03      C
ATOM 10733 O   SER C 405   -0.031 108.543  97.020 1.00 20.53      O
ATOM 10734 N   TYR C 406    2.044 108.702  97.896 1.00 20.00      N
ATOM 10736 CA  TYR C 406    2.552 109.688  96.939 1.00 19.97      C
ATOM 10738 CB  TYR C 406    3.997 110.093  97.260 1.00 19.91      C
ATOM 10741 CG  TYR C 406    4.514 111.222  96.395 1.00 18.94      C
ATOM 10742 CD1 TYR C 406    4.398 112.542  96.797 1.00 18.21      C
ATOM 10744 CE1 TYR C 406    4.847 113.586  95.972 1.00 18.94      C
ATOM 10746 CZ  TYR C 406    5.411 113.290  94.746 1.00 19.59      C
ATOM 10747 OH  TYR C 406    5.865 114.295  93.927 1.00 19.88      O
ATOM 10749 CE2 TYR C 406    5.526 111.977  94.325 1.00 19.06      C
ATOM 10751 CD2 TYR C 406    5.074 110.963  95.140 1.00 19.40      C
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ATOM 10753  C   TYR C 406    2.469 109.172 95.510 1.00 20.35      C
ATOM 10754  O   TYR C 406    2.047 109.898 94.626 1.00 20.27      O
ATOM 10755  N   THR C 407    2.854 107.916 95.308 1.00 21.37      N
ATOM 10757  CA  THR C 407    2.865 107.287 93.989 1.00 21.91      C
ATOM 10759  CB  THR C 407    3.704 105.960 93.992 1.00 21.83      C
ATOM 10761  OG1 THR C 407    3.301 105.094 95.061 1.00 20.54      O
ATOM 10763  CG2 THR C 407    5.188 106.223 94.250 1.00 22.28      C
ATOM 10767  C   THR C 407    1.453 106.984 93.492 1.00 23.05      C
ATOM 10768  O   THR C 407    1.188 107.060 92.300 1.00 22.82      O
ATOM 10769  N   ARG C 408    0.559 106.637 94.410 1.00 24.46      N
ATOM 10771  CA  ARG C 408   -0.807 106.265 94.065 1.00 25.85      C
ATOM 10773  CB  ARG C 408   -1.491 105.678 95.298 1.00 26.37      C
ATOM 10776  CG  ARG C 408   -2.916 105.192 95.109 1.00 29.43      C
ATOM 10779  CD  ARG C 408   -3.866 105.573 96.266 1.00 33.67      C
ATOM 10782  NE  ARG C 408   -4.798 104.490 96.601 1.00 36.66      N
ATOM 10784  CZ  ARG C 408   -4.462 103.356 97.226 1.00 38.90      C
ATOM 10785  NH1 ARG C 408   -3.199 103.126 97.604 1.00 39.24      N
ATOM 10788  NH2 ARG C 408   -5.401 102.442 97.467 1.00 39.84      N
ATOM 10791  C   ARG C 408   -1.557 107.482 93.507 1.00 26.15      C
ATOM 10792  O   ARG C 408   -2.403 107.358 92.626 1.00 26.69      O
ATOM 10793  N   ILE C 409   -1.209 108.659 94.002 1.00 26.64      N
ATOM 10795  CA  ILE C 409   -1.754 109.912 93.505 1.00 26.91      C
ATOM 10797  CB  ILE C 409   -1.638 110.998 94.597 1.00 27.04      C
ATOM 10799  CG1 ILE C 409   -2.524 110.619 95.793 1.00 26.61      C
ATOM 10802  CD1 ILE C 409   -2.277 111.419 97.028 1.00 26.26      C
ATOM 10806  CG2 ILE C 409   -2.001 112.382 94.029 1.00 26.68      C
ATOM 10810  C   ILE C 409   -1.040 110.368 92.237 1.00 27.54      C
ATOM 10811  O   ILE C 409   -1.668 110.954 91.354 1.00 28.11      O
ATOM 10812  N   LYS C 410    0.259 110.098 92.134 1.00 28.09      N
ATOM 10814  CA  LYS C 410    1.047 110.546 90.980 1.00 28.82      C
ATOM 10816  CB  LYS C 410    2.559 110.495 91.278 1.00 28.98      C
ATOM 10819  CG  LYS C 410    3.403 111.356 90.321 1.00 30.02      C
ATOM 10822  CD  LYS C 410    4.840 110.867 90.222 1.00 30.46      C
ATOM 10825  CE  LYS C 410    5.799 111.947 89.723 1.00 31.05      C
ATOM 10828  NZ  LYS C 410    7.240 111.551 89.853 1.00 29.84      N
ATOM 10832  C   LYS C 410    0.712 109.774 89.692 1.00 28.70      C
ATOM 10833  O   LYS C 410    0.346 110.385 88.709 1.00 29.01      O
ATOM 10834  N   ARG C 411    0.867 108.449 89.701 1.00 28.92      N
ATOM 10836  CA  ARG C 411    0.430 107.583 88.601 1.00 29.15      C
ATOM 10838  CB  ARG C 411    1.606 106.837 87.950 1.00 29.26      C
ATOM 10841  CG  ARG C 411    2.899 107.622 87.784 1.00 30.52      C
ATOM 10844  CD  ARG C 411    3.182 108.149 86.369 1.00 31.58      C
ATOM 10847  NE  ARG C 411    3.796 109.475 86.457 1.00 33.05      N
ATOM 10849  CZ  ARG C 411    3.974 110.310 85.441 1.00 33.60      C
ATOM 10850  NH1 ARG C 411    3.616 109.968 84.209 1.00 33.77      N
ATOM 10853  NH2 ARG C 411    4.534 111.498 85.663 1.00 34.14      N
ATOM 10856  C   ARG C 411   -0.590 106.549 89.094 1.00 29.28      C
ATOM 10857  O   ARG C 411   -0.255 105.380 89.239 1.00 29.32      O
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ATOM 10858 N   PRO C 412   -1.824 106.966 89.355 1.00 29.53      N
ATOM 10859 CA  PRO C 412   -2.879 106.030 89.763 1.00 29.86      C
ATOM 10861 CB  PRO C 412   -4.163 106.873 89.649 1.00 29.93      C
ATOM 10864 CG  PRO C 412   -3.753 108.184 89.010 1.00 29.82      C
ATOM 10867 CD  PRO C 412   -2.313 108.356 89.323 1.00 29.66      C
ATOM 10870 C   PRO C 412   -3.001 104.756 88.908 1.00 30.29      C
ATOM 10871 O   PRO C 412   -3.254 103.676 89.450 1.00 30.16      O
ATOM 10872 N   GLN C 413   -2.825 104.874 87.596 1.00 30.80      N
ATOM 10874 CA  GLN C 413   -2.992 103.731 86.706 1.00 31.04      C
ATOM 10876 CB  GLN C 413   -3.915 104.115 85.539 1.00 31.05      C
ATOM 10879 CG  GLN C 413   -5.426 103.950 85.866 1.00 30.71      C
ATOM 10882 CD  GLN C 413   -6.187 105.272 85.930 1.00 30.28      C
ATOM 10883 OE1 GLN C 413   -6.175 105.957 86.959 1.00 29.01      O
ATOM 10884 NE2 GLN C 413   -6.862 105.622 84.834 1.00 29.34      N
ATOM 10887 C   GLN C 413   -1.634 103.130 86.260 1.00 31.55      C
ATOM 10888 O   GLN C 413   -1.438 102.784 85.091 1.00 31.41      O
ATOM 10889 N   ASP C 414   -0.708 103.024 87.225 1.00 31.99      N
ATOM 10891 CA  ASP C 414    0.502 102.201 87.115 1.00 32.28      C
ATOM 10893 CB  ASP C 414    1.693 102.973 86.522 1.00 32.58      C
ATOM 10896 CG  ASP C 414    2.975 102.105 86.405 1.00 33.35      C
ATOM 10897 OD1 ASP C 414    2.879 100.856 86.272 1.00 33.13      O
ATOM 10898 OD2 ASP C 414    4.128 102.585 86.433 1.00 34.30      O
ATOM 10899 C   ASP C 414    0.852 101.696 88.509 1.00 32.43      C
ATOM 10900 O   ASP C 414    1.710 102.258 89.188 1.00 32.08      O
ATOM 10901 N   GLN C 415    0.174 100.631 88.924 1.00 32.65      N
ATOM 10903 CA  GLN C 415    0.314 100.093 90.274 1.00 32.99      C
ATOM 10905 CB  GLN C 415   -0.656 98.927 90.491 1.00 33.51      C
ATOM 10908 CG  GLN C 415   -2.143 99.269 90.401 1.00 34.79      C
ATOM 10911 CD  GLN C 415   -3.020 98.074 90.764 1.00 36.38      C
ATOM 10912 OE1 GLN C 415   -3.260 97.819 91.951 1.00 38.72      O
ATOM 10913 NE2 GLN C 415   -3.474 97.330 89.755 1.00 35.09      N
ATOM 10916 C   GLN C 415    1.722 99.590 90.587 1.00 32.61      C
ATOM 10917 O   GLN C 415    2.129 99.584 91.743 1.00 32.42      O
ATOM 10918 N   LEU C 416    2.454 99.160 89.565 1.00 32.30      N
ATOM 10920 CA  LEU C 416    3.753 98.527 89.771 1.00 32.17      C
ATOM 10922 CB  LEU C 416    4.034 97.516 88.657 1.00 32.29      C
ATOM 10925 CG  LEU C 416    2.979 96.416 88.479 1.00 32.42      C
ATOM 10927 CD1 LEU C 416    3.251 95.656 87.204 1.00 33.06      C
ATOM 10931 CD2 LEU C 416    2.945 95.460 89.664 1.00 32.56      C
ATOM 10935 C   LEU C 416    4.919 99.516 89.890 1.00 31.82      C
ATOM 10936 O   LEU C 416    6.051 99.101 90.125 1.00 32.18      O
ATOM 10937 N   ARG C 417    4.659 100.810 89.747 1.00 31.15      N
ATOM 10939 CA  ARG C 417    5.718 101.799 89.922 1.00 30.76      C
ATOM 10941 CB  ARG C 417    5.213 103.220 89.686 1.00 30.88      C
ATOM 10944 CG  ARG C 417    5.774 103.872 88.419 1.00 32.56      C
ATOM 10947 CD  ARG C 417    6.769 104.984 88.659 1.00 33.06      C
ATOM 10950 NE  ARG C 417    6.167 106.036 89.465 1.00 33.10      N
ATOM 10952 CZ  ARG C 417    6.705 107.226 89.671 1.00 32.51      C
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ATOM 10953 NH1 ARG C 417    7.871 107.568 89.131 1.00 32.25    N
ATOM 10956 NH2 ARG C 417    6.069 108.083 90.440 1.00 32.59    N
ATOM 10959 C   ARG C 417    6.270 101.708 91.326 1.00 29.89    C
ATOM 10960 O   ARG C 417    7.484 101.677 91.523 1.00 29.82    O
ATOM 10961 N   PHE C 418    5.370 101.677 92.304 1.00 28.71    N
ATOM 10963 CA  PHE C 418    5.785 101.604 93.696 1.00 27.67    C
ATOM 10965 CB  PHE C 418    4.577 101.748 94.635 1.00 27.27    C
ATOM 10968 CG  PHE C 418    4.925 101.628 96.091 1.00 27.01    C
ATOM 10969 CD1 PHE C 418    5.796 102.527 96.686 1.00 25.81    C
ATOM 10971 CE1 PHE C 418    6.115 102.414 98.026 1.00 25.84    C
ATOM 10973 CZ  PHE C 418    5.574 101.394 98.780 1.00 24.52    C
ATOM 10975 CE2 PHE C 418    4.721 100.493 98.194 1.00 25.16    C
ATOM 10977 CD2 PHE C 418    4.397 100.607 96.864 1.00 26.05    C
ATOM 10979 C   PHE C 418    6.622 100.325 93.959 1.00 27.10    C
ATOM 10980 O   PHE C 418    7.792 100.429 94.329 1.00 26.14    O
ATOM 10981 N   PRO C 419    6.060  99.135 93.738 1.00 26.80    N
ATOM 10982 CA  PRO C 419    6.844  97.900 93.856 1.00 26.96    C
ATOM 10984 CB  PRO C 419    5.977  96.874 93.134 1.00 27.01    C
ATOM 10987 CG  PRO C 419    4.610  97.353 93.378 1.00 27.08    C
ATOM 10990 CD  PRO C 419    4.664  98.843 93.378 1.00 26.62    C
ATOM 10993 C   PRO C 419    8.223  97.993 93.211 1.00 26.84    C
ATOM 10994 O   PRO C 419    9.203  97.658 93.860 1.00 26.82    O
ATOM 10995 N   ARG C 420    8.299  98.496 91.987 1.00 26.73    N
ATOM 10997 CA  ARG C 420    9.570  98.571 91.276 1.00 27.04    C
ATOM 10999 CB  ARG C 420    9.361  99.034 89.840 1.00 27.39    C
ATOM 11002 CG  ARG C 420    8.656  98.054 88.947 1.00 27.46    C
ATOM 11005 CD  ARG C 420    8.183  98.684 87.646 1.00 29.39    C
ATOM 11008 NE  ARG C 420    7.317  97.784 86.889 1.00 31.22    N
ATOM 11010 CZ  ARG C 420    6.565  98.143 85.847 1.00 31.95    C
ATOM 11011 NH1 ARG C 420    6.554  99.402 85.396 1.00 31.78    N
ATOM 11014 NH2 ARG C 420    5.809  97.228 85.249 1.00 31.90    N
ATOM 11017 C   ARG C 420   10.562  99.498 91.959 1.00 26.91    C
ATOM 11018 O   ARG C 420   11.759  99.239 91.949 1.00 26.33    O
ATOM 11019 N   MET C 421   10.060 100.578 92.549 1.00 27.61    N
ATOM 11021 CA  MET C 421   10.885 101.478 93.363 1.00 27.93    C
ATOM 11023 CB  MET C 421   10.045 102.620 93.907 1.00 28.32    C
ATOM 11026 CG  MET C 421    9.688 103.654 92.883 1.00 30.21    C
ATOM 11029 SD  MET C 421    8.716 104.966 93.627 1.00 32.58    S
ATOM 11030 CE  MET C 421    9.940 105.809 94.482 1.00 33.19    C
ATOM 11034 C   MET C 421   11.521 100.734 94.534 1.00 27.79    C
ATOM 11035 O   MET C 421   12.722 100.836 94.760 1.00 27.73    O
ATOM 11036 N   LEU C 422   10.708  99.989 95.274 1.00 27.78    N
ATOM 11038 CA  LEU C 422   11.202  99.217 96.408 1.00 27.79    C
ATOM 11040 CB  LEU C 422   10.043  98.588 97.169 1.00 27.66    C
ATOM 11043 CG  LEU C 422    9.063  99.511 97.880 1.00 26.55    C
ATOM 11045 CD1 LEU C 422    8.090  98.660 98.651 1.00 26.95    C
ATOM 11049 CD2 LEU C 422    9.751 100.480 98.795 1.00 26.39    C
ATOM 11053 C   LEU C 422   12.150  98.114 95.956 1.00 28.12    C
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ATOM 11054 O   LEU C 422   13.132 97.809 96.633 1.00 28.59      O
ATOM 11055 N   MET C 423   11.870 97.534 94.798 1.00 28.33      N
ATOM 11057 CA  MET C 423   12.715 96.483 94.237 1.00 28.41      C
ATOM 11059 CB  MET C 423   12.081 95.934 92.979 1.00 28.75      C
ATOM 11062 CG  MET C 423   10.748 95.268 93.212 1.00 30.50      C
ATOM 11065 SD  MET C 423   10.930 93.534 93.490 1.00 35.50      S
ATOM 11066 CE  MET C 423    9.884 92.827 92.200 1.00 34.00      C
ATOM 11070 C   MET C 423   14.131 96.976 93.913 1.00 28.15      C
ATOM 11071 O   MET C 423   15.063 96.182 93.805 1.00 28.57      O
ATOM 11072 N   LYS C 424   14.294 98.281 93.741 1.00 27.55      N
ATOM 11074 CA  LYS C 424   15.600 98.847 93.450 1.00 26.88      C
ATOM 11076 CB  LYS C 424   15.454 100.193 92.735 1.00 27.25     C
ATOM 11079 CG  LYS C 424   14.701 100.076 91.386 1.00 27.60     C
ATOM 11082 CD  LYS C 424   15.579 99.556 90.226 1.00 27.94      C
ATOM 11085 CE  LYS C 424   14.719 98.805 89.211 1.00 28.39      C
ATOM 11088 NZ  LYS C 424   15.410 98.585 87.902 1.00 29.25      N
ATOM 11092 C   LYS C 424   16.436 98.973 94.707 1.00 26.24      C
ATOM 11093 O   LYS C 424   17.655 99.041 94.625 1.00 26.48      O
ATOM 11094 N   LEU C 425   15.791 99.003 95.872 1.00 25.14      N
ATOM 11096 CA  LEU C 425   16.506 98.866 97.129 1.00 24.15      C
ATOM 11098 CB  LEU C 425   15.567 99.077 98.337 1.00 23.90      C
ATOM 11101 CG  LEU C 425   14.860 100.426 98.511 1.00 23.74     C
ATOM 11103 CD1 LEU C 425   14.053 100.418 99.797 1.00 24.76     C
ATOM 11107 CD2 LEU C 425   15.812 101.618 98.508 1.00 22.52     C
ATOM 11111 C   LEU C 425   17.197 97.482 97.189 1.00 23.59      C
ATOM 11112 O   LEU C 425   18.274 97.338 97.784 1.00 23.14      O
ATOM 11113 N   VAL C 426   16.573 96.479 96.582 1.00 23.08      N
ATOM 11115 CA  VAL C 426   17.171 95.149 96.491 1.00 23.43      C
ATOM 11117 CB  VAL C 426   16.246 94.123 95.795 1.00 22.81      C
ATOM 11119 CG1 VAL C 426   16.890 92.781 95.767 1.00 22.20      C
ATOM 11123 CG2 VAL C 426   14.924 94.020 96.482 1.00 22.82      C
ATOM 11127 C   VAL C 426   18.462 95.224 95.683 1.00 24.42      C
ATOM 11128 O   VAL C 426   19.526 94.762 96.105 1.00 24.43      O
ATOM 11129 N   SER C 427   18.359 95.812 94.502 1.00 25.52      N
ATOM 11131 CA  SER C 427   19.505 95.924 93.622 1.00 26.19      C
ATOM 11133 CB  SER C 427   19.065 96.482 92.262 1.00 26.30      C
ATOM 11136 OG  SER C 427   18.360 95.477 91.533 1.00 26.75      O
ATOM 11138 C   SER C 427   20.618 96.763 94.264 1.00 26.49      C
ATOM 11139 O   SER C 427   21.786 96.499 94.041 1.00 26.75      O
ATOM 11140 N   LEU C 428   20.245 97.742 95.084 1.00 26.85      N
ATOM 11142 CA  LEU C 428   21.201 98.598 95.801 1.00 27.26      C
ATOM 11144 CB  LEU C 428   20.470 99.730 96.531 1.00 27.07      C
ATOM 11147 CG  LEU C 428   20.240 101.034 95.800 1.00 27.26     C
ATOM 11149 CD1 LEU C 428   19.184 101.845 96.516 1.00 27.13     C
ATOM 11153 CD2 LEU C 428   21.552 101.814 95.667 1.00 27.93     C
ATOM 11157 C   LEU C 428   22.017 97.855 96.854 1.00 27.70      C
ATOM 11158 O   LEU C 428   23.140 98.254 97.162 1.00 27.62      O
ATOM 11159 N   ARG C 429   21.425 96.826 97.457 1.00 28.50      N
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ATOM 11161 CA  ARG C 429   22.133 96.012 98.453 1.00 29.02      C
ATOM 11163 CB  ARG C 429   21.210 94.976 99.098 1.00 29.00      C
ATOM 11166 CG  ARG C 429   20.383 95.471 100.213 1.00 28.11     C
ATOM 11169 CD  ARG C 429   21.178 96.085 101.350 1.00 28.39     C
ATOM 11172 NE  ARG C 429   20.346 97.046 102.056 1.00 27.41     N
ATOM 11174 CZ  ARG C 429   19.451 96.727 102.963 1.00 28.85     C
ATOM 11175 NH1 ARG C 429   19.265 95.468 103.322 1.00 31.15     N
ATOM 11178 NH2 ARG C 429   18.738 97.673 103.537 1.00 30.76     N
ATOM 11181 C   ARG C 429   23.287 95.272 97.821 1.00 29.62      C
ATOM 11182 O   ARG C 429   24.364 95.222 98.392 1.00 29.89      O
ATOM 11183 N   THR C 430   23.046 94.695 96.647 1.00 30.50      N
ATOM 11185 CA  THR C 430   24.082 93.960 95.920 1.00 31.56      C
ATOM 11187 CB  THR C 430   23.477 93.160 94.730 1.00 31.43      C
ATOM 11189 OG1 THR C 430   22.265 92.503 95.126 1.00 31.34      O
ATOM 11191 CG2 THR C 430   24.389 92.000 94.338 1.00 31.71      C
ATOM 11195 C   THR C 430   25.168 94.907 95.409 1.00 32.38      C
ATOM 11196 O   THR C 430   26.358 94.618 95.511 1.00 32.48      O
ATOM 11197 N   LEU C 431   24.738 96.043 94.873 1.00 33.48      N
ATOM 11199 CA  LEU C 431   25.643 97.033 94.289 1.00 34.20      C
ATOM 11201 CB  LEU C 431   24.832 98.140 93.596 1.00 34.11      C
ATOM 11204 CG  LEU C 431   25.343 98.822 92.324 1.00 33.49      C
ATOM 11206 CD1 LEU C 431   26.590 98.178 91.752 1.00 33.07      C
ATOM 11210 CD2 LEU C 431   24.240 98.866 91.285 1.00 33.37      C
ATOM 11214 C   LEU C 431   26.536 97.643 95.365 1.00 35.06      C
ATOM 11215 O   LEU C 431   27.692 97.982 95.111 1.00 35.38      O
ATOM 11216 N   SER C 432   25.988 97.769 96.568 1.00 35.73      N
ATOM 11218 CA  SER C 432   26.733 98.282 97.704 1.00 36.37      C
ATOM 11220 CB  SER C 432   25.800 98.485 98.901 1.00 36.43      C
ATOM 11223 OG  SER C 432   26.504 98.406 100.127 1.00 36.57     O
ATOM 11225 C   SER C 432   27.868 97.327 98.071 1.00 36.97      C
ATOM 11226 O   SER C 432   28.969 97.770 98.394 1.00 37.30      O
ATOM 11227 N   SER C 433   27.601 96.022 98.016 1.00 37.48      N
ATOM 11229 CA  SER C 433   28.627 95.009 98.299 1.00 37.95      C
ATOM 11231 CB  SER C 433   27.995 93.618 98.379 1.00 37.93      C
ATOM 11234 OG  SER C 433   28.968 92.652 98.721 1.00 37.61      O
ATOM 11236 C   SER C 433   29.790 94.991 97.291 1.00 38.16      C
ATOM 11237 O   SER C 433   30.820 94.381 97.553 1.00 38.14      O
ATOM 11238 N   VAL C 434   29.607 95.651 96.147 1.00 38.84      N
ATOM 11240 CA  VAL C 434   30.666 95.848 95.138 1.00 39.27      C
ATOM 11242 CB  VAL C 434   30.044 96.250 93.744 1.00 39.17      C
ATOM 11244 CG1 VAL C 434   30.315 97.718 93.380 1.00 39.12      C
ATOM 11248 CG2 VAL C 434   30.531 95.330 92.633 1.00 39.40      C
ATOM 11252 C   VAL C 434   31.725 96.891 95.561 1.00 39.80      C
ATOM 11253 O   VAL C 434   32.823 96.916 95.006 1.00 39.88      O
ATOM 11254 N   HIS C 435   31.382 97.751 96.525 1.00 40.41      N
ATOM 11256 CA  HIS C 435   32.263 98.832 96.992 1.00 40.75      C
ATOM 11258 CB  HIS C 435   31.502 99.758 97.954 1.00 41.04      C
ATOM 11261 CG  HIS C 435   32.197 101.061 98.230 1.00 41.83     C
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ATOM  11262  ND1 HIS C 435   32.204 101.650  99.477 1.00 43.00      N
ATOM  11264  CE1 HIS C 435   32.880 102.784  99.426 1.00 42.90      C
ATOM  11266  NE2 HIS C 435   33.310 102.954  98.189 1.00 42.88      N
ATOM  11268  CD2 HIS C 435   32.895 101.892  97.420 1.00 42.60      C
ATOM  11270  C   HIS C 435   33.530  98.341  97.683 1.00 40.75      C
ATOM  11271  O   HIS C 435   34.607  98.910  97.479 1.00 40.64      O
ATOM  11272  N   SER C 436   33.394  97.313  98.519 1.00 40.83      N
ATOM  11274  CA  SER C 436   34.549  96.701  99.182 1.00 40.81      C
ATOM  11276  CB  SER C 436   34.139  95.418  99.918 1.00 40.91      C
ATOM  11279  OG  SER C 436   34.193  94.289  99.059 1.00 40.56      O
ATOM  11281  C   SER C 436   35.655  96.390  98.176 1.00 40.74      C
ATOM  11282  O   SER C 436   36.814  96.743  98.390 1.00 40.71      O
ATOM  11283  N   GLU C 437   35.268  95.763  97.066 1.00 40.74      N
ATOM  11285  CA  GLU C 437   36.197  95.305  96.030 1.00 40.71      C
ATOM  11287  CB  GLU C 437   35.425  94.739  94.828 1.00 40.67      C
ATOM  11290  CG  GLU C 437   34.469  93.593  95.137 1.00 40.23      C
ATOM  11293  CD  GLU C 437   34.106  92.800  93.896 1.00 39.60      C
ATOM  11294  OE1 GLU C 437   33.001  93.005  93.346 1.00 38.73      O
ATOM  11295  OE2 GLU C 437   34.936  91.976  93.465 1.00 38.66      O
ATOM  11296  C   GLU C 437   37.138  96.401  95.522 1.00 40.81      C
ATOM  11297  O   GLU C 437   38.340  96.162  95.354 1.00 40.76      O
ATOM  11298  N   GLN C 438   36.585  97.589  95.268 1.00 40.83      N
ATOM  11300  CA  GLN C 438   37.337  98.683  94.638 1.00 40.82      C
ATOM  11302  CB  GLN C 438   36.410  99.883  94.373 1.00 40.70      C
ATOM  11305  CG  GLN C 438   37.068 101.099  93.691 1.00 40.71      C
ATOM  11308  CD  GLN C 438   38.002 100.735  92.534 1.00 40.27      C
ATOM  11309  OE1 GLN C 438   37.560 100.554  91.396 1.00 39.98      O
ATOM  11310  NE2 GLN C 438   39.293 100.640  92.827 1.00 39.83      N
ATOM  11313  C   GLN C 438   38.566  99.108  95.459 1.00 40.82      C
ATOM  11314  O   GLN C 438   39.710  98.822  95.082 1.00 40.52      O
ATOM  11315  N   LEU D 220   -8.763  88.448  91.008 1.00 28.95      N
ATOM  11317  CA  LEU D 220   -7.657  87.934  90.143 1.00 29.15      C
ATOM  11319  CB  LEU D 220   -6.902  86.806  90.853 1.00 29.27      C
ATOM  11322  CG  LEU D 220   -5.432  87.114  91.167 1.00 29.73      C
ATOM  11324  CD1 LEU D 220   -4.849  86.119  92.161 1.00 29.41      C
ATOM  11328  CD2 LEU D 220   -4.615  87.140  89.884 1.00 30.06      C
ATOM  11332  C   LEU D 220   -8.182  87.431  88.804 1.00 29.19      C
ATOM  11333  O   LEU D 220   -9.391  87.338  88.604 1.00 29.21      O
ATOM  11336  N   THR D 221   -7.256  87.099  87.902 1.00 29.27      N
ATOM  11338  CA  THR D 221   -7.575  86.615  86.554 1.00 29.28      C
ATOM  11340  CB  THR D 221   -6.913  87.534  85.479 1.00 29.32      C
ATOM  11342  OG1 THR D 221   -5.692  88.106  85.984 1.00 28.79      O
ATOM  11344  CG2 THR D 221   -7.801  88.749  85.171 1.00 29.41      C
ATOM  11348  C   THR D 221   -7.143  85.150  86.365 1.00 29.28      C
ATOM  11349  O   THR D 221   -6.549  84.553  87.258 1.00 29.18      O
ATOM  11350  N   ALA D 222   -7.456  84.577  85.203 1.00 29.31      N
ATOM  11352  CA  ALA D 222   -7.181  83.159  84.924 1.00 29.35      C
ATOM  11354  CB  ALA D 222   -7.804  82.757  83.551 1.00 29.22      C
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ATOM 11358 C   ALA D 222   -5.656 82.809 84.958 1.00 29.44        C
ATOM 11359 O   ALA D 222   -5.157 81.752 85.705 1.00 29.16        O
ATOM 11360 N   ALA D 223   -4.904 83.701 84.215 1.00 29.57        N
ATOM 11362 CA  ALA D 223   -3.496 83.431 83.921 1.00 29.62        C
ATOM 11364 CB  ALA D 223   -2.932 84.505 82.983 1.00 29.57        C
ATOM 11368 C   ALA D 223   -2.641 83.330 85.176 1.00 29.86        C
ATOM 11369 O   ALA D 223   -1.436 83.076 85.086 1.00 30.12        O
ATOM 11370 N   GLN D 224   -3.268 83.533 86.336 1.00 29.94        N
ATOM 11372 CA  GLN D 224   -2.600 83.477 87.627 1.00 29.72        C
ATOM 11374 CB  GLN D 224   -2.680 84.855 88.269 1.00 29.66        C
ATOM 11377 CG  GLN D 224   -1.781 85.888 87.593 1.00 29.31        C
ATOM 11380 CD  GLN D 224   -2.541 87.109 87.102 1.00 29.38        C
ATOM 11381 OE1 GLN D 224   -3.157 87.082 86.012 1.00 29.53        O
ATOM 11382 NE2 GLN D 224   -2.494 88.193 87.890 1.00 27.96        N
ATOM 11385 C   GLN D 224   -3.196 82.396 88.546 1.00 29.88        C
ATOM 11386 O   GLN D 224   -2.456 81.694 89.234 1.00 29.66        O
ATOM 11387 N   GLU D 225   -4.521 82.258 88.555 1.00 30.07        N
ATOM 11389 CA  GLU D 225   -5.187 81.167 89.275 1.00 30.33        C
ATOM 11391 CB  GLU D 225   -6.682 81.152 88.950 1.00 30.40        C
ATOM 11394 CG  GLU D 225   -7.461 82.282 89.610 1.00 30.36        C
ATOM 11397 CD  GLU D 225   -8.667 82.737 88.804 1.00 30.17        C
ATOM 11398 OE1 GLU D 225   -8.979 82.129 87.758 1.00 29.85        O
ATOM 11399 OE2 GLU D 225   -9.309 83.721 89.223 1.00 30.32        O
ATOM 11400 C   GLU D 225   -4.571 79.807 88.932 1.00 30.57        C
ATOM 11401 O   GLU D 225   -4.378 78.965 89.810 1.00 30.67        O
ATOM 11402 N   LEU D 226   -4.276 79.602 87.650 1.00 30.89        N
ATOM 11404 CA  LEU D 226   -3.532 78.429 87.191 1.00 31.09        C
ATOM 11406 CB  LEU D 226   -3.299 78.511 85.679 1.00 31.16        C
ATOM 11409 CG  LEU D 226   -2.287 77.542 85.052 1.00 31.34        C
ATOM 11411 CD1 LEU D 226   -2.850 76.125 85.020 1.00 31.59        C
ATOM 11415 CD2 LEU D 226   -1.896 77.993 83.645 1.00 31.34        C
ATOM 11419 C   LEU D 226   -2.185 78.349 87.893 1.00 31.35        C
ATOM 11420 O   LEU D 226   -1.809 77.305 88.432 1.00 31.20        O
ATOM 11421 N   MET D 227   -1.470 79.472 87.869 1.00 31.59        N
ATOM 11423 CA  MET D 227   -0.083 79.541 88.320 1.00 31.75        C
ATOM 11425 CB  MET D 227    0.609 80.786 87.720 1.00 31.89        C
ATOM 11428 CG  MET D 227    0.860 81.966 88.690 1.00 32.31        C
ATOM 11431 SD  MET D 227    1.984 83.226 88.025 1.00 33.24        S
ATOM 11432 CE  MET D 227    1.224 83.647 86.440 1.00 33.06        C
ATOM 11436 C   MET D 227    0.098 79.497 89.844 1.00 31.85        C
ATOM 11437 O   MET D 227    1.213 79.295 90.315 1.00 31.82        O
ATOM 11438 N   ILE D 228   -0.974 79.686 90.610 1.00 31.96        N
ATOM 11440 CA  ILE D 228   -0.854 79.727 92.071 1.00 32.04        C
ATOM 11442 CB  ILE D 228   -1.987 80.566 92.719 1.00 31.92        C
ATOM 11444 CG1 ILE D 228   -1.576 82.037 92.779 1.00 31.37        C
ATOM 11447 CD1 ILE D 228   -2.743 82.991 92.849 1.00 31.33        C
ATOM 11451 CG2 ILE D 228   -2.328 80.067 94.127 1.00 31.73        C
ATOM 11455 C   ILE D 228   -0.827 78.305 92.614 1.00 32.37        C
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ATOM 11456 O   ILE D 228   -0.010 77.988 93.473 1.00 32.44   O
ATOM 11457 N   GLN D 229   -1.714 77.453 92.103 1.00 32.56   N
ATOM 11459 CA  GLN D 229   -1.733 76.043 92.487 1.00 32.78   C
ATOM 11461 CB  GLN D 229   -2.996 75.356 91.906 1.00 32.76   C
ATOM 11464 CG  GLN D 229   -4.335 75.978 92.370 1.00 32.71   C
ATOM 11467 CD  GLN D 229   -4.744 75.524 93.763 1.00 32.75   C
ATOM 11468 OE1 GLN D 229   -3.936 75.563 94.700 1.00 31.80   O
ATOM 11469 NE2 GLN D 229   -5.999 75.096 93.907 1.00 32.33   N
ATOM 11472 C   GLN D 229   -0.440 75.350 91.982 1.00 33.05   C
ATOM 11473 O   GLN D 229    0.135 74.327 92.656 1.00 33.15   O
ATOM 11474 N   GLN D 230    0.009 75.921 90.794 1.00 33.39   N
ATOM 11476 CA  GLN D 230    1.166 75.417 90.043 1.00 33.55   C
ATOM 11478 CB  GLN D 230    1.445 76.289 88.805 1.00 33.67   C
ATOM 11481 CG  GLN D 230    1.826 75.540 87.551 1.00 33.91   C
ATOM 11484 CD  GLN D 230    1.364 76.276 86.300 1.00 34.51   C
ATOM 11485 OE1 GLN D 230    1.819 77.391 86.028 1.00 34.49   O
ATOM 11486 NE2 GLN D 230    0.447 75.665 85.549 1.00 34.29   N
ATOM 11489 C   GLN D 230    2.374 75.467 90.930 1.00 33.43   C
ATOM 11490 O   GLN D 230    3.046 74.460 91.141 1.00 33.59   O
ATOM 11491 N   LEU D 231    2.641 76.661 91.446 1.00 33.40   N
ATOM 11493 CA  LEU D 231    3.781 76.875 92.309 1.00 33.21   C
ATOM 11495 CB  LEU D 231    3.998 78.379 92.575 1.00 33.18   C
ATOM 11498 CG  LEU D 231    4.273 79.265 91.346 1.00 32.99   C
ATOM 11500 CD1 LEU D 231    4.425 80.740 91.736 1.00 32.52   C
ATOM 11504 CD2 LEU D 231    5.499 78.784 90.569 1.00 32.74   C
ATOM 11508 C   LEU D 231    3.570 76.087 93.601 1.00 33.15   C
ATOM 11509 O   LEU D 231    4.533 75.557 94.139 1.00 33.50   O
ATOM 11510 N   VAL D 232    2.320 75.969 94.067 1.00 32.97   N
ATOM 11512 CA  VAL D 232    2.039 75.248 95.312 1.00 33.17   C
ATOM 11514 CB  VAL D 232    0.587 75.455 95.820 1.00 33.06   C
ATOM 11516 CG1 VAL D 232    0.318 74.585 97.064 1.00 32.90   C
ATOM 11520 CG2 VAL D 232    0.338 76.935 96.158 1.00 33.46   C
ATOM 11524 C   VAL D 232    2.312 73.759 95.151 1.00 33.28   C
ATOM 11525 O   VAL D 232    3.141 73.202 95.853 1.00 33.14   O
ATOM 11526 N   ALA D 233    1.614 73.126 94.212 1.00 34.04   N
ATOM 11528 CA  ALA D 233    1.718 71.673 93.992 1.00 34.23   C
ATOM 11530 CB  ALA D 233    0.815 71.259 92.862 1.00 34.35   C
ATOM 11534 C   ALA D 233    3.154 71.166 93.734 1.00 34.53   C
ATOM 11535 O   ALA D 233    3.554 70.076 94.230 1.00 34.76   O
ATOM 11536 N   ALA D 234    3.918 71.973 92.977 1.00 34.74   N
ATOM 11538 CA  ALA D 234    5.344 71.719 92.709 1.00 35.05   C
ATOM 11540 CB  ALA D 234    5.809 72.619 91.577 1.00 35.03   C
ATOM 11544 C   ALA D 234    6.262 71.908 93.946 1.00 35.58   C
ATOM 11545 O   ALA D 234    7.262 71.194 94.097 1.00 35.16   O
ATOM 11546 N   GLN D 235    5.930 72.871 94.806 1.00 36.15   N
ATOM 11548 CA  GLN D 235    6.654 73.071 96.071 1.00 36.99   C
ATOM 11550 CB  GLN D 235    6.310 74.438 96.707 1.00 36.87   C
ATOM 11553 CG  GLN D 235    6.970 74.686 98.075 1.00 37.19   C
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| ATOM | 11556 | CD | GLN | D | 235 | 7.619 | 76.055 | 98.190 | 1.00 | 37.14 | C |
|------|-------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 11557 | OE1 | GLN | D | 235 | 6.965 | 77.073 | 97.965 | 1.00 | 37.04 | O |
| ATOM | 11558 | NE2 | GLN | D | 235 | 8.903 | 76.083 | 98.550 | 1.00 | 37.27 | N |
| ATOM | 11561 | C | GLN | D | 235 | 6.390 | 71.925 | 97.062 | 1.00 | 37.60 | C |
| ATOM | 11562 | O | GLN | D | 235 | 7.248 | 71.619 | 97.899 | 1.00 | 37.51 | O |
| ATOM | 11563 | N | LEU | D | 236 | 5.222 | 71.282 | 96.949 | 1.00 | 38.43 | N |
| ATOM | 11565 | CA | LEU | D | 236 | 4.860 | 70.192 | 97.864 | 1.00 | 39.26 | C |
| ATOM | 11567 | CB | LEU | D | 236 | 3.338 | 70.064 | 97.978 | 1.00 | 39.43 | C |
| ATOM | 11570 | CG | LEU | D | 236 | 2.567 | 71.306 | 98.443 | 1.00 | 39.79 | C |
| ATOM | 11572 | CD1 | LEU | D | 236 | 1.064 | 71.102 | 98.223 | 1.00 | 39.92 | C |
| ATOM | 11576 | CD2 | LEU | D | 236 | 2.871 | 71.655 | 99.893 | 1.00 | 39.80 | C |
| ATOM | 11580 | C | LEU | D | 236 | 5.452 | 68.850 | 97.430 | 1.00 | 39.81 | C |
| ATOM | 11581 | O | LEU | D | 236 | 5.643 | 67.956 | 98.261 | 1.00 | 39.67 | O |
| ATOM | 11582 | N | GLN | D | 237 | 5.726 | 68.711 | 96.131 | 1.00 | 40.68 | N |
| ATOM | 11584 | CA | GLN | D | 237 | 6.315 | 67.489 | 95.579 | 1.00 | 41.25 | C |
| ATOM | 11586 | CB | GLN | D | 237 | 5.821 | 67.226 | 94.145 | 1.00 | 41.13 | C |
| ATOM | 11589 | CG | GLN | D | 237 | 6.585 | 67.935 | 93.017 | 1.00 | 40.75 | C |
| ATOM | 11592 | CD | GLN | D | 237 | 5.844 | 67.883 | 91.677 | 1.00 | 40.51 | C |
| ATOM | 11593 | OE1 | GLN | D | 237 | 6.027 | 68.757 | 90.814 | 1.00 | 39.72 | O |
| ATOM | 11594 | NE2 | GLN | D | 237 | 5.012 | 66.857 | 91.504 | 1.00 | 40.17 | N |
| ATOM | 11597 | C | GLN | D | 237 | 7.841 | 67.546 | 95.654 | 1.00 | 42.10 | C |
| ATOM | 11598 | O | GLN | D | 237 | 8.510 | 66.563 | 95.380 | 1.00 | 42.26 | O |
| ATOM | 11599 | N | CYS | D | 238 | 8.380 | 68.711 | 96.004 | 1.00 | 43.04 | N |
| ATOM | 11601 | CA | CYS | D | 238 | 9.770 | 68.823 | 96.432 | 1.00 | 43.87 | C |
| ATOM | 11603 | CB | CYS | D | 238 | 10.309 | 70.236 | 96.159 | 1.00 | 43.91 | C |
| ATOM | 11606 | SG | CYS | D | 238 | 10.457 | 70.656 | 94.396 | 1.00 | 45.75 | S |
| ATOM | 11607 | C | CYS | D | 238 | 9.826 | 68.500 | 97.928 | 1.00 | 44.20 | C |
| ATOM | 11608 | O | CYS | D | 238 | 10.759 | 67.856 | 98.409 | 1.00 | 44.25 | O |
| ATOM | 11609 | N | ASN | D | 239 | 8.806 | 68.945 | 98.654 | 1.00 | 44.70 | N |
| ATOM | 11611 | CA | ASN | D | 239 | 8.702 | 68.694 | 100.086 | 1.00 | 45.10 | C |
| ATOM | 11613 | CB | ASN | D | 239 | 7.436 | 69.347 | 100.642 | 1.00 | 45.18 | C |
| ATOM | 11616 | CG | ASN | D | 239 | 7.578 | 69.744 | 102.095 | 1.00 | 45.80 | C |
| ATOM | 11617 | OD1 | ASN | D | 239 | 7.843 | 68.902 | 102.957 | 1.00 | 47.36 | O |
| ATOM | 11618 | ND2 | ASN | D | 239 | 7.398 | 71.032 | 102.377 | 1.00 | 45.05 | N |
| ATOM | 11621 | C | ASN | D | 239 | 8.682 | 67.208 | 100.414 | 1.00 | 45.50 | C |
| ATOM | 11622 | O | ASN | D | 239 | 9.311 | 66.770 | 101.377 | 1.00 | 45.49 | O |
| ATOM | 11623 | N | LYS | D | 240 | 7.960 | 66.444 | 99.594 | 1.00 | 46.10 | N |
| ATOM | 11625 | CA | LYS | D | 240 | 7.731 | 65.027 | 99.833 | 1.00 | 46.33 | C |
| ATOM | 11627 | CB | LYS | D | 240 | 6.397 | 64.592 | 99.208 | 1.00 | 46.56 | C |
| ATOM | 11630 | CG | LYS | D | 240 | 5.141 | 65.058 | 99.956 | 1.00 | 46.25 | C |
| ATOM | 11633 | CD | LYS | D | 240 | 3.856 | 64.551 | 99.264 | 1.00 | 45.65 | C |
| ATOM | 11636 | CE | LYS | D | 240 | 3.156 | 63.437 | 100.044 | 1.00 | 45.11 | C |
| ATOM | 11639 | NZ | LYS | D | 240 | 1.688 | 63.399 | 99.770 | 1.00 | 44.72 | N |
| ATOM | 11643 | C | LYS | D | 240 | 8.871 | 64.208 | 99.233 | 1.00 | 46.68 | C |
| ATOM | 11644 | O | LYS | D | 240 | 9.504 | 63.410 | 99.925 | 1.00 | 46.55 | O |
| ATOM | 11645 | N | ARG | D | 241 | 9.114 | 64.416 | 97.936 | 1.00 | 47.01 | N |
| ATOM | 11647 | CA | ARG | D | 241 | 10.142 | 63.696 | 97.173 | 1.00 | 47.21 | C |
| ATOM | 11649 | CB | ARG | D | 241 | 10.492 | 64.483 | 95.897 | 1.00 | 47.16 | C |

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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 11652 | CG | ARG D | 241 | 11.627 | 63.918 | 95.045 | 1.00 46.82 | C |
| ATOM | 11655 | CD | ARG D | 241 | 11.567 | 64.331 | 93.563 | 1.00 46.58 | C |
| ATOM | 11658 | NE | ARG D | 241 | 12.364 | 63.442 | 92.710 | 1.00 46.17 | N |
| ATOM | 11660 | CZ | ARG D | 241 | 12.307 | 63.393 | 91.377 | 1.00 45.75 | C |
| ATOM | 11661 | NH1 | ARG D | 241 | 11.483 | 64.181 | 90.689 | 1.00 45.44 | N |
| ATOM | 11664 | NH2 | ARG D | 241 | 13.089 | 62.543 | 90.720 | 1.00 45.82 | N |
| ATOM | 11667 | C | ARG D | 241 | 11.397 | 63.436 | 98.007 | 1.00 47.55 | C |
| ATOM | 11668 | O | ARG D | 241 | 11.920 | 62.313 | 98.024 | 1.00 47.59 | O |
| ATOM | 11669 | N | SER D | 242 | 11.862 | 64.474 | 98.701 | 1.00 47.87 | N |
| ATOM | 11671 | CA | SER D | 242 | 12.994 | 64.360 | 99.614 | 1.00 48.11 | C |
| ATOM | 11673 | CB | SER D | 242 | 14.130 | 65.283 | 99.158 | 1.00 48.20 | C |
| ATOM | 11676 | OG | SER D | 242 | 14.748 | 64.781 | 97.974 | 1.00 47.67 | O |
| ATOM | 11678 | C | SER D | 242 | 12.537 | 64.649 | 101.054 | 1.00 48.36 | C |
| ATOM | 11679 | O | SER D | 242 | 12.852 | 65.690 | 101.633 | 1.00 48.19 | O |
| ATOM | 11680 | N | PHE D | 243 | 11.771 | 63.697 | 101.595 | 1.00 48.74 | N |
| ATOM | 11682 | CA | PHE D | 243 | 11.203 | 63.734 | 102.957 | 1.00 48.90 | C |
| ATOM | 11684 | CB | PHE D | 243 | 9.680 | 63.930 | 102.863 | 1.00 49.16 | C |
| ATOM | 11687 | CG | PHE D | 243 | 9.049 | 64.568 | 104.079 | 1.00 49.90 | C |
| ATOM | 11688 | CD1 | PHE D | 243 | 9.309 | 65.895 | 104.404 | 1.00 50.91 | C |
| ATOM | 11690 | CE1 | PHE D | 243 | 8.712 | 66.489 | 105.519 | 1.00 51.28 | C |
| ATOM | 11692 | CZ | PHE D | 243 | 7.832 | 65.750 | 106.311 | 1.00 51.43 | C |
| ATOM | 11694 | CE2 | PHE D | 243 | 7.556 | 64.428 | 105.985 | 1.00 51.08 | C |
| ATOM | 11696 | CD2 | PHE D | 243 | 8.159 | 63.846 | 104.873 | 1.00 50.59 | C |
| ATOM | 11698 | C | PHE D | 243 | 11.505 | 62.425 | 103.726 | 1.00 48.63 | C |
| ATOM | 11699 | O | PHE D | 243 | 11.394 | 62.376 | 104.952 | 1.00 48.58 | O |
| ATOM | 11700 | N | SER D | 244 | 11.849 | 61.364 | 102.996 | 1.00 48.29 | N |
| ATOM | 11702 | CA | SER D | 244 | 12.382 | 60.144 | 103.592 | 1.00 48.06 | C |
| ATOM | 11704 | CB | SER D | 244 | 11.270 | 59.310 | 104.218 | 1.00 48.10 | C |
| ATOM | 11707 | OG | SER D | 244 | 10.746 | 58.391 | 103.277 | 1.00 47.55 | O |
| ATOM | 11709 | C | SER D | 244 | 13.092 | 59.317 | 102.533 | 1.00 47.93 | C |
| ATOM | 11710 | O | SER D | 244 | 14.311 | 59.167 | 102.573 | 1.00 47.82 | O |
| ATOM | 11711 | N | LYS D | 248 | 17.681 | 58.291 | 106.502 | 1.00 23.61 | N |
| ATOM | 11713 | CA | LYS D | 248 | 19.122 | 58.064 | 106.472 | 1.00 23.99 | C |
| ATOM | 11715 | CB | LYS D | 248 | 19.499 | 57.007 | 105.410 | 1.00 24.25 | C |
| ATOM | 11718 | CG | LYS D | 248 | 19.137 | 57.358 | 103.961 | 1.00 24.56 | C |
| ATOM | 11721 | CD | LYS D | 248 | 19.346 | 56.148 | 103.041 | 1.00 24.62 | C |
| ATOM | 11724 | CE | LYS D | 248 | 18.163 | 55.183 | 103.058 | 1.00 24.46 | C |
| ATOM | 11727 | NZ | LYS D | 248 | 18.102 | 54.398 | 101.778 | 1.00 25.51 | N |
| ATOM | 11731 | C | LYS D | 248 | 19.917 | 59.357 | 106.268 | 1.00 23.95 | C |
| ATOM | 11732 | O | LYS D | 248 | 20.826 | 59.416 | 105.435 | 1.00 23.68 | O |
| ATOM | 11733 | N | VAL D | 249 | 19.535 | 60.397 | 107.025 | 1.00 24.26 | N |
| ATOM | 11735 | CA | VAL D | 249 | 20.399 | 61.558 | 107.303 | 1.00 24.27 | C |
| ATOM | 11737 | CB | VAL D | 249 | 19.578 | 62.852 | 107.446 | 1.00 24.61 | C |
| ATOM | 11739 | CG1 | VAL D | 249 | 20.201 | 63.839 | 108.484 | 1.00 25.06 | C |
| ATOM | 11743 | CG2 | VAL D | 249 | 19.440 | 63.533 | 106.095 | 1.00 24.50 | C |
| ATOM | 11747 | C | VAL D | 249 | 21.208 | 61.299 | 108.596 | 1.00 24.25 | C |
| ATOM | 11748 | O | VAL D | 249 | 20.827 | 60.454 | 109.439 | 1.00 25.68 | O |
| ATOM | 11749 | N | THR D | 250 | 22.350 | 61.969 | 108.718 | 1.00 23.74 | N |

| ATOM | 11751 | CA  | THR | D | 250 | 23.272 | 61.701 | 109.820 | 1.00 | 23.91 | C |
| ATOM | 11753 | CB  | THR | D | 250 | 24.543 | 62.578 | 109.695 | 1.00 | 23.77 | C |
| ATOM | 11755 | OG1 | THR | D | 250 | 25.365 | 62.086 | 108.617 | 1.00 | 26.19 | O |
| ATOM | 11757 | CG2 | THR | D | 250 | 25.424 | 62.428 | 110.942 | 1.00 | 24.26 | C |
| ATOM | 11761 | C   | THR | D | 250 | 22.520 | 62.005 | 111.099 | 1.00 | 23.00 | C |
| ATOM | 11762 | O   | THR | D | 250 | 22.155 | 63.151 | 111.273 | 1.00 | 23.62 | O |
| ATOM | 11763 | N   | PRO | D | 251 | 22.290 | 61.031 | 111.999 | 1.00 | 22.63 | N |
| ATOM | 11764 | CA  | PRO | D | 251 | 21.419 | 61.299 | 113.152 | 1.00 | 22.29 | C |
| ATOM | 11766 | CB  | PRO | D | 251 | 21.455 | 59.981 | 113.949 | 1.00 | 22.27 | C |
| ATOM | 11769 | CG  | PRO | D | 251 | 21.943 | 58.958 | 113.006 | 1.00 | 21.63 | C |
| ATOM | 11772 | CD  | PRO | D | 251 | 22.839 | 59.655 | 112.042 | 1.00 | 21.97 | C |
| ATOM | 11775 | C   | PRO | D | 251 | 21.941 | 62.446 | 114.002 | 1.00 | 22.45 | C |
| ATOM | 11776 | O   | PRO | D | 251 | 23.142 | 62.692 | 114.044 | 1.00 | 22.32 | O |
| ATOM | 11777 | N   | TRP | D | 252 | 21.022 | 63.154 | 114.645 | 1.00 | 22.89 | N |
| ATOM | 11779 | CA  | TRP | D | 252 | 21.355 | 64.180 | 115.621 | 1.00 | 23.20 | C |
| ATOM | 11781 | CB  | TRP | D | 252 | 20.140 | 65.080 | 115.841 | 1.00 | 23.25 | C |
| ATOM | 11784 | CG  | TRP | D | 252 | 20.347 | 66.211 | 116.785 | 1.00 | 22.82 | C |
| ATOM | 11785 | CD1 | TRP | D | 252 | 19.884 | 66.301 | 118.071 | 1.00 | 23.00 | C |
| ATOM | 11787 | NE1 | TRP | D | 252 | 20.249 | 67.508 | 118.619 | 1.00 | 22.54 | N |
| ATOM | 11789 | CE2 | TRP | D | 252 | 20.961 | 68.223 | 117.693 | 1.00 | 20.94 | C |
| ATOM | 11790 | CD2 | TRP | D | 252 | 21.041 | 67.437 | 116.525 | 1.00 | 21.09 | C |
| ATOM | 11791 | CE3 | TRP | D | 252 | 21.712 | 67.957 | 115.418 | 1.00 | 19.19 | C |
| ATOM | 11793 | CZ3 | TRP | D | 252 | 22.281 | 69.207 | 115.510 | 1.00 | 19.44 | C |
| ATOM | 11795 | CH2 | TRP | D | 252 | 22.194 | 69.963 | 116.688 | 1.00 | 19.35 | C |
| ATOM | 11797 | CZ2 | TRP | D | 252 | 21.545 | 69.484 | 117.790 | 1.00 | 20.08 | C |
| ATOM | 11799 | C   | TRP | D | 252 | 21.736 | 63.472 | 116.928 | 1.00 | 23.76 | C |
| ATOM | 11800 | O   | TRP | D | 252 | 20.969 | 62.645 | 117.429 | 1.00 | 23.42 | O |
| ATOM | 11801 | N   | PRO | D | 253 | 22.905 | 63.792 | 117.483 | 1.00 | 24.27 | N |
| ATOM | 11802 | CA  | PRO | D | 253 | 23.396 | 63.095 | 118.684 | 1.00 | 24.96 | C |
| ATOM | 11804 | CB  | PRO | D | 253 | 24.851 | 63.570 | 118.782 | 1.00 | 25.11 | C |
| ATOM | 11807 | CG  | PRO | D | 253 | 24.834 | 64.960 | 118.129 | 1.00 | 24.28 | C |
| ATOM | 11810 | CD  | PRO | D | 253 | 23.846 | 64.833 | 117.020 | 1.00 | 23.79 | C |
| ATOM | 11813 | C   | PRO | D | 253 | 22.630 | 63.460 | 119.965 | 1.00 | 25.47 | C |
| ATOM | 11814 | O   | PRO | D | 253 | 22.438 | 64.633 | 120.217 | 1.00 | 25.12 | O |
| ATOM | 11815 | N   | LEU | D | 254 | 22.229 | 62.467 | 120.758 | 1.00 | 26.64 | N |
| ATOM | 11817 | CA  | LEU | D | 254 | 21.485 | 62.709 | 122.000 | 1.00 | 27.24 | C |
| ATOM | 11819 | CB  | LEU | D | 254 | 19.976 | 62.544 | 121.766 | 1.00 | 27.66 | C |
| ATOM | 11822 | CG  | LEU | D | 254 | 19.017 | 63.271 | 122.725 | 1.00 | 28.68 | C |
| ATOM | 11824 | CD1 | LEU | D | 254 | 17.671 | 63.554 | 122.025 | 1.00 | 29.38 | C |
| ATOM | 11828 | CD2 | LEU | D | 254 | 18.808 | 62.484 | 124.047 | 1.00 | 28.27 | C |
| ATOM | 11832 | C   | LEU | D | 254 | 21.955 | 61.747 | 123.077 | 1.00 | 27.16 | C |
| ATOM | 11833 | O   | LEU | D | 254 | 23.095 | 61.829 | 123.524 | 1.00 | 27.35 | O |
| ATOM | 11834 | N   | ALA | D | 263 | 30.857 | 65.517 | 119.743 | 1.00 | 15.82 | N |
| ATOM | 11836 | CA  | ALA | D | 263 | 29.511 | 66.081 | 119.841 | 1.00 | 15.12 | C |
| ATOM | 11838 | CB  | ALA | D | 263 | 29.334 | 66.786 | 121.199 | 1.00 | 15.15 | C |
| ATOM | 11842 | C   | ALA | D | 263 | 29.243 | 67.060 | 118.699 | 1.00 | 15.39 | C |
| ATOM | 11843 | O   | ALA | D | 263 | 28.303 | 66.893 | 117.915 | 1.00 | 15.04 | O |
| ATOM | 11844 | N   | ARG | D | 264 | 30.098 | 68.077 | 118.619 | 1.00 | 15.54 | N |

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ATOM 11846 CA  ARG D 264    29.892 69.248 117.769 1.00 15.58        C
ATOM 11848 CB  ARG D 264    30.954 70.302 118.100 1.00 15.89        C
ATOM 11851 CG  ARG D 264    30.868 71.599 117.300 1.00 17.92        C
ATOM 11854 CD  ARG D 264    32.120 72.463 117.405 1.00 21.06        C
ATOM 11857 NE  ARG D 264    32.058 73.391 118.544 1.00 23.59        N
ATOM 11859 CZ  ARG D 264    33.010 73.564 119.469 1.00 24.08        C
ATOM 11860 NH1 ARG D 264    34.143 72.872 119.436 1.00 24.73        N
ATOM 11863 NH2 ARG D 264    32.822 74.448 120.445 1.00 24.83        N
ATOM 11866 C   ARG D 264    29.960 68.951 116.281 1.00 15.32        C
ATOM 11867 O   ARG D 264    29.230 69.545 115.484 1.00 16.01        O
ATOM 11868 N   GLN D 265    30.875 68.083 115.896 1.00 14.71        N
ATOM 11870 CA  GLN D 265    31.051 67.768 114.501 1.00 14.45        C
ATOM 11872 CB  GLN D 265    32.249 66.810 114.335 1.00 14.27        C
ATOM 11875 CG  GLN D 265    32.745 66.608 112.924 1.00 15.64        C
ATOM 11878 CD  GLN D 265    32.846 67.907 112.170 1.00 17.15        C
ATOM 11879 OE1 GLN D 265    33.325 68.907 112.706 1.00 20.03        O
ATOM 11880 NE2 GLN D 265    32.355 67.925 110.934 1.00 18.99        N
ATOM 11883 C   GLN D 265    29.761 67.158 113.938 1.00 13.72        C
ATOM 11884 O   GLN D 265    29.284 67.510 112.836 1.00 13.91        O
ATOM 11885 N   GLN D 266    29.188 66.252 114.739 1.00 12.91        N
ATOM 11887 CA  GLN D 266    28.149 65.325 114.235 1.00 11.84        C -
ATOM 11889 CB  GLN D 266    27.945 64.059 115.134 1.00 11.26        C
ATOM 11892 CG  GLN D 266    26.835 63.221 114.605 1.00 10.67        C
ATOM 11895 CD  GLN D 266    26.473 62.038 115.472 1.00  9.95        C
ATOM 11896 OE1 GLN D 266    27.441 61.240 115.906 1.00 14.03        O
ATOM 11897 NE2 GLN D 266    25.095 61.840 115.695 1.00  9.62        N
ATOM 11900 C   GLN D 266    26.893 66.124 114.044 1.00 10.73        C
ATOM 11901 O   GLN D 266    26.124 65.836 113.138 1.00 10.79        O
ATOM 11902 N   ARG D 267    26.711 67.150 114.880 1.00 10.72        N
ATOM 11904 CA  ARG D 267    25.655 68.143 114.690 1.00  9.57        C
ATOM 11906 CB  ARG D 267    25.658 69.131 115.851 1.00 10.02        C
ATOM 11909 CG  ARG D 267    25.292 68.491 117.165 1.00 11.16        C
ATOM 11912 CD  ARG D 267    25.501 69.363 118.383 1.00 12.48        C
ATOM 11915 NE  ARG D 267    24.643 68.881 119.462 1.00 14.21        N
ATOM 11917 CZ  ARG D 267    24.994 68.041 120.411 1.00 14.60        C
ATOM 11918 NH1 ARG D 267    26.225 67.555 120.483 1.00 16.97        N
ATOM 11921 NH2 ARG D 267    24.093 67.674 121.302 1.00 16.03        N
ATOM 11924 C   ARG D 267    25.821 68.885 113.371 1.00  8.78        C
ATOM 11925 O   ARG D 267    24.841 69.132 112.648 1.00  8.97        O
ATOM 11926 N   PHE D 268    27.054 69.283 113.095 1.00  7.58        N
ATOM 11928 CA  PHE D 268    27.375 70.047 111.908 1.00  8.70        C
ATOM 11930 CB  PHE D 268    28.790 70.601 112.062 1.00  8.84        C
ATOM 11933 CG  PHE D 268    29.219 71.516 110.957 1.00 10.11        C
ATOM 11934 CD1 PHE D 268    28.729 72.811 110.887 1.00 11.63        C
ATOM 11936 CE1 PHE D 268    29.142 73.670 109.868 1.00 11.77        C
ATOM 11938 CZ  PHE D 268    30.060 73.230 108.922 1.00 12.70        C
ATOM 11940 CE2 PHE D 268    30.562 71.937 108.989 1.00 11.80        C
ATOM 11942 CD2 PHE D 268    30.145 71.092 110.003 1.00 11.22        C
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ATOM 11944 C   PHE D 268    27.245 69.208 110.625 1.00 9.18      C
ATOM 11945 O   PHE D 268    26.834 69.718 109.592 1.00 9.25      O
ATOM 11946 N   ALA D 269    27.602 67.917 110.723 1.00 10.13     N
ATOM 11948 CA  ALA D 269    27.536 66.911 109.618 1.00 10.21     C
ATOM 11950 CB  ALA D 269    28.250 65.598 110.063 1.00 10.31     C
ATOM 11954 C   ALA D 269    26.083 66.592 109.228 1.00 10.91     C
ATOM 11955 O   ALA D 269    25.729 66.630 108.035 1.00 12.36     O
ATOM 11956 N   HIS D 270    25.258 66.372 110.264 1.00 11.18     N
ATOM 11958 CA  HIS D 270    23.750 66.466 110.215 1.00 11.49     C
ATOM 11960 CB  HIS D 270    23.176 66.476 111.661 1.00 11.52     C
ATOM 11963 CG  HIS D 270    21.683 66.484 111.742 1.00 10.43     C
ATOM 11964 ND1 HIS D 270    20.923 65.342 111.597 1.00 11.21     N
ATOM 11966 CE1 HIS D 270    19.646 65.643 111.764 1.00 10.17     C
ATOM 11968 NE2 HIS D 270    19.553 66.931 112.026 1.00 10.35     N
ATOM 11970 CD2 HIS D 270    20.813 67.478 112.029 1.00 10.38     C
ATOM 11972 C   HIS D 270    23.211 67.698 109.459 1.00 11.03     C
ATOM 11973 O   HIS D 270    22.516 67.540 108.464 1.00 10.07     O
ATOM 11974 N   PHE D 271    23.531 68.900 109.935 1.00 12.19     N
ATOM 11976 CA  PHE D 271    22.949 70.147 109.352 1.00 12.95     C
ATOM 11978 CB  PHE D 271    23.338 71.403 110.125 1.00 12.73     C
ATOM 11981 CG  PHE D 271    22.560 71.629 111.385 1.00 13.70     C
ATOM 11982 CD1 PHE D 271    21.203 71.347 111.467 1.00 12.94     C
ATOM 11984 CE1 PHE D 271    20.500 71.577 112.633 1.00 13.61     C
ATOM 11986 CZ  PHE D 271    21.137 72.109 113.746 1.00 14.47     C
ATOM 11988 CE2 PHE D 271    22.484 72.401 113.692 1.00 14.69     C
ATOM 11990 CD2 PHE D 271    23.197 72.161 112.507 1.00 15.14     C
ATOM 11992 C   PHE D 271    23.384 70.355 107.899 1.00 13.45     C
ATOM 11993 O   PHE D 271    22.601 70.837 107.099 1.00 13.59     O
ATOM 11994 N   THR D 272    24.621 70.002 107.553 1.00 13.98     N
ATOM 11996 CA  THR D 272    25.086 70.246 106.173 1.00 14.53     C
ATOM 11998 CB  THR D 272    26.635 70.206 106.058 1.00 14.51     C
ATOM 12000 OG1 THR D 272    27.122 68.943 106.475 1.00 15.24     O
ATOM 12002 CG2 THR D 272    27.306 71.190 107.012 1.00 15.84     C
ATOM 12006 C   THR D 272    24.445 69.214 105.206 1.00 14.43     C
ATOM 12007 O   THR D 272    24.234 69.486 104.024 1.00 14.03     O
ATOM 12008 N   GLU D 273    24.099 68.056 105.755 1.00 14.40     N
ATOM 12010 CA  GLU D 273    23.338 67.043 105.059 1.00 14.64     C
ATOM 12012 CB  GLU D 273    23.426 65.719 105.819 1.00 14.96     C
ATOM 12015 CG  GLU D 273    24.778 65.038 105.647 1.00 16.16     C
ATOM 12018 CD  GLU D 273    24.830 63.592 106.169 1.00 18.32     C
ATOM 12019 OE1 GLU D 273    23.809 62.878 106.075 1.00 19.66     O
ATOM 12020 OE2 GLU D 273    25.899 63.167 106.677 1.00 17.51     O
ATOM 12021 C   GLU D 273    21.888 67.443 104.842 1.00 15.07     C
ATOM 12022 O   GLU D 273    21.340 67.154 103.794 1.00 14.78     O
ATOM 12023 N   LEU D 274    21.272 68.137 105.805 1.00 16.32     N
ATOM 12025 CA  LEU D 274    19.953 68.721 105.606 1.00 16.15     C
ATOM 12027 CB  LEU D 274    19.436 69.337 106.928 1.00 16.45     C
ATOM 12030 CG  LEU D 274    19.056 68.335 108.026 1.00 16.01     C

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ATOM 12032 CD1 LEU D 274    18.540 69.067 109.263 1.00 16.34        C
ATOM 12036 CD2 LEU D 274    18.000 67.367 107.499 1.00 16.01        C
ATOM 12040 C   LEU D 274    20.056 69.776 104.516 1.00 16.68        C
ATOM 12041 O   LEU D 274    19.120 69.983 103.737 1.00 17.92        O
ATOM 12042 N   ALA D 275    21.186 70.471 104.489 1.00 16.79        N
ATOM 12044 CA  ALA D 275    21.356 71.617 103.597 1.00 16.89        C
ATOM 12046 CB  ALA D 275    22.500 72.509 104.061 1.00 16.76        C
ATOM 12050 C   ALA D 275    21.583 71.118 102.192 1.00 17.11        C
ATOM 12051 O   ALA D 275    21.303 71.812 101.234 1.00 16.72        O
ATOM 12052 N   ILE D 276    22.090 69.900 102.066 1.00 17.87        N
ATOM 12054 CA  ILE D 276    22.223 69.283 100.760 1.00 18.36        C
ATOM 12056 CB  ILE D 276    23.154 68.035 100.816 1.00 18.67        C
ATOM 12058 CG1 ILE D 276    24.608 68.473 100.639 1.00 18.87        C
ATOM 12061 CD1 ILE D 276    25.608 67.385 100.887 1.00 18.69        C
ATOM 12065 CG2 ILE D 276    22.794 67.012 99.727 1.00 18.15         C
ATOM 12069 C   ILE D 276    20.832 68.935 100.221 1.00 18.77        C
ATOM 12070 O   ILE D 276    20.526 69.241 99.077 1.00 18.97         O
ATOM 12071 N   ILE D 277    20.001 68.310 101.058 1.00 19.19        N
ATOM 12073 CA  ILE D 277    18.626 67.977 100.694 1.00 19.42        C
ATOM 12075 CB  ILE D 277    17.814 67.396 101.907 1.00 19.72        C
ATOM 12077 CG1 ILE D 277    18.524 66.239 102.634 1.00 18.37        C
ATOM 12080 CD1 ILE D 277    19.224 65.322 101.768 1.00 19.65        C
ATOM 12084 CG2 ILE D 277    16.448 66.914 101.453 1.00 20.12        C
ATOM 12088 C   ILE D 277    17.908 69.228 100.193 1.00 19.62        C
ATOM 12089 O   ILE D 277    17.204 69.171 99.196 1.00 19.60         O
ATOM 12090 N   SER D 278    18.096 70.353 100.885 1.00 19.92        N
ATOM 12092 CA  SER D 278    17.355 71.567 100.574 1.00 20.02        C
ATOM 12094 CB  SER D 278    17.558 72.644 101.655 1.00 19.97        C
ATOM 12097 OG  SER D 278    18.492 73.625 101.252 1.00 21.92        O
ATOM 12099 C   SER D 278    17.740 72.073 99.180 1.00 19.78         C
ATOM 12100 O   SER D 278    16.882 72.363 98.358 1.00 19.35         O
ATOM 12101 N   VAL D 279    19.040 72.165 98.936 1.00 19.89         N
ATOM 12103 CA  VAL D 279    19.576 72.580 97.641 1.00 19.81         C
ATOM 12105 CB  VAL D 279    21.126 72.501 97.591 1.00 19.42         C
ATOM 12107 CG1 VAL D 279    21.637 72.653 96.153 1.00 19.77         C
ATOM 12111 CG2 VAL D 279    21.748 73.576 98.443 1.00 18.88         C
ATOM 12115 C   VAL D 279    18.982 71.734 96.522 1.00 20.45         C
ATOM 12116 O   VAL D 279    18.659 72.259 95.466 1.00 19.99         O
ATOM 12117 N   GLN D 280    18.835 70.432 96.767 1.00 21.26         N
ATOM 12119 CA  GLN D 280    18.253 69.518 95.793 1.00 21.89         C
ATOM 12121 CB  GLN D 280    18.454 68.061 96.226 1.00 22.04         C
ATOM 12124 CG  GLN D 280    19.872 67.550 95.960 1.00 22.96         C
ATOM 12127 CD  GLN D 280    20.046 66.071 96.261 1.00 24.00         C
ATOM 12128 OE1 GLN D 280    20.010 65.662 97.426 1.00 24.83         O
ATOM 12129 NE2 GLN D 280    20.235 65.266 95.213 1.00 23.62         N
ATOM 12132 C   GLN D 280    16.774 69.799 95.496 1.00 22.33         C
ATOM 12133 O   GLN D 280    16.340 69.632 94.367 1.00 22.96         O
ATOM 12134 N   GLU D 281    16.010 70.205 96.500 1.00 22.93         N
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ATOM 12136 CA  GLU D 281    14.615 70.609 96.310 1.00 23.51      C
ATOM 12138 CB  GLU D 281    13.922 70.779 97.667 1.00 23.43      C
ATOM 12141 CG  GLU D 281    13.495 69.457 98.254 1.00 23.68      C
ATOM 12144 CD  GLU D 281    13.353 69.463 99.760 1.00 25.28      C
ATOM 12145 OE1 GLU D 281    13.729 68.423 100.343 1.00 26.48     O
ATOM 12146 OE2 GLU D 281    12.861 70.465 100.359 1.00 24.67     O
ATOM 12147 C   GLU D 281    14.496 71.921 95.542 1.00 23.98      C
ATOM 12148 O   GLU D 281    13.561 72.114 94.762 1.00 24.80      O
ATOM 12149 N   ILE D 282    15.439 72.823 95.774 1.00 23.97      N
ATOM 12151 CA  ILE D 282    15.439 74.118 95.115 1.00 24.13      C
ATOM 12153 CB  ILE D 282    16.421 75.055 95.838 1.00 23.78      C
ATOM 12155 CG1 ILE D 282    15.867 75.383 97.240 1.00 24.74      C
ATOM 12158 CD1 ILE D 282    16.916 75.591 98.309 1.00 23.97      C
ATOM 12162 CG2 ILE D 282    16.662 76.327 95.020 1.00 23.83      C
ATOM 12166 C   ILE D 282    15.751 73.985 93.600 1.00 24.22      C
ATOM 12167 O   ILE D 282    15.155 74.682 92.787 1.00 24.55      O
ATOM 12168 N   VAL D 283    16.670 73.097 93.234 1.00 24.41      N
ATOM 12170 CA  VAL D 283    16.956 72.791 91.820 1.00 24.66      C
ATOM 12172 CB  VAL D 283    18.235 71.912 91.676 1.00 24.33      C
ATOM 12174 CG1 VAL D 283    18.391 71.373 90.260 1.00 24.13      C
ATOM 12178 CG2 VAL D 283    19.473 72.705 92.072 1.00 23.75      C
ATOM 12182 C   VAL D 283    15.761 72.083 91.163 1.00 25.36      C
ATOM 12183 O   VAL D 283    15.421 72.357 90.018 1.00 25.75      O
ATOM 12184 N   ASP D 284    15.122 71.179 91.895 1.00 26.12      N
ATOM 12186 CA  ASP D 284    13.939 70.481 91.407 1.00 26.56      C
ATOM 12188 CB  ASP D 284    13.477 69.450 92.449 1.00 26.78      C
ATOM 12191 CG  ASP D 284    14.515 68.305 92.682 1.00 27.85      C
ATOM 12192 OD1 ASP D 284    14.259 67.409 93.538 1.00 30.00      O
ATOM 12193 OD2 ASP D 284    15.603 68.210 92.054 1.00 30.37      O
ATOM 12194 C   ASP D 284    12.782 71.436 91.138 1.00 26.95      C
ATOM 12195 O   ASP D 284    12.044 71.260 90.179 1.00 27.02      O
ATOM 12196 N   PHE D 285    12.622 72.446 91.989 1.00 27.53      N
ATOM 12198 CA  PHE D 285    11.417 73.279 91.953 1.00 27.94      C
ATOM 12200 CB  PHE D 285    11.293 74.075 93.258 1.00 27.87      C
ATOM 12203 CG  PHE D 285    10.176 75.093 93.245 1.00 29.17      C
ATOM 12204 CD1 PHE D 285     8.851 74.690 93.166 1.00 29.61      C
ATOM 12206 CE1 PHE D 285     7.821 75.630 93.177 1.00 30.27      C
ATOM 12208 CZ  PHE D 285     8.110 76.986 93.266 1.00 30.56      C
ATOM 12210 CE2 PHE D 285     9.431 77.402 93.358 1.00 31.11      C
ATOM 12212 CD2 PHE D 285    10.456 76.454 93.341 1.00 30.82      C
ATOM 12214 C   PHE D 285    11.439 74.241 90.750 1.00 28.00      C
ATOM 12215 O   PHE D 285    10.438 74.409 90.017 1.00 27.92      O
ATOM 12216 N   ALA D 286    12.590 74.880 90.566 1.00 28.10      N
ATOM 12218 CA  ALA D 286    12.730 75.968 89.602 1.00 27.97      C
ATOM 12220 CB  ALA D 286    14.056 76.692 89.813 1.00 28.07      C
ATOM 12224 C   ALA D 286    12.596 75.475 88.170 1.00 28.29      C
ATOM 12225 O   ALA D 286    12.360 76.262 87.255 1.00 28.87      O
ATOM 12226 N   LYS D 287    12.734 74.169 87.968 1.00 28.01      N
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ATOM 12228 CA  LYS D 287    12.422 73.559 86.676 1.00 27.63      C
ATOM 12230 CB  LYS D 287    12.979 72.134 86.616 1.00 27.51      C
ATOM 12233 CG  LYS D 287    14.495 72.052 86.779 1.00 27.18      C
ATOM 12236 CD  LYS D 287    15.172 71.370 85.606 1.00 26.98      C
ATOM 12239 CE  LYS D 287    16.398 70.598 86.049 1.00 26.86      C
ATOM 12242 NZ  LYS D 287    17.334 71.436 86.856 1.00 27.39      N
ATOM 12246 C   LYS D 287    10.913 73.524 86.373 1.00 27.49      C
ATOM 12247 O   LYS D 287    10.516 73.471 85.203 1.00 27.79      O
ATOM 12248 N   GLN D 288    10.091 73.531 87.422 1.00 27.27      N
ATOM 12250 CA  GLN D 288     8.626 73.517 87.304 1.00 26.99      C
ATOM 12252 CB  GLN D 288     7.953 72.736 88.465 1.00 27.01      C
ATOM 12255 CG  GLN D 288     8.863 71.878 89.396 1.00 26.76      C
ATOM 12258 CD  GLN D 288     9.458 70.660 88.723 1.00 25.89      C
ATOM 12259 OE1 GLN D 288     9.535 70.602 87.493 1.00 25.79      O
ATOM 12260 NE2 GLN D 288     9.897 69.684 89.528 1.00 25.05      N
ATOM 12263 C   GLN D 288     8.043 74.941 87.257 1.00 26.93      C
ATOM 12264 O   GLN D 288     6.844 75.108 87.028 1.00 26.61      O
ATOM 12265 N   VAL D 289     8.877 75.955 87.517 1.00 27.06      N
ATOM 12267 CA  VAL D 289     8.426 77.352 87.510 1.00 27.16      C
ATOM 12269 CB  VAL D 289     9.379 78.326 88.303 1.00 27.22      C
ATOM 12271 CG1 VAL D 289     8.891 79.799 88.205 1.00 27.25      C
ATOM 12275 CG2 VAL D 289     9.470 77.922 89.763 1.00 26.81      C
ATOM 12279 C   VAL D 289     8.328 77.764 86.051 1.00 27.19      C
ATOM 12280 O   VAL D 289     9.332 77.715 85.335 1.00 27.05      O
ATOM 12281 N   PRO D 290     7.126 78.142 85.605 1.00 27.38      N
ATOM 12282 CA  PRO D 290     6.897 78.447 84.183 1.00 27.53      C
ATOM 12284 CB  PRO D 290     5.381 78.718 84.093 1.00 27.35      C
ATOM 12287 CG  PRO D 290     4.873 78.829 85.482 1.00 27.65      C
ATOM 12290 CD  PRO D 290     5.898 78.282 86.415 1.00 27.30      C
ATOM 12293 C   PRO D 290     7.699 79.645 83.668 1.00 27.65      C
ATOM 12294 O   PRO D 290     7.530 80.781 84.151 1.00 27.72      O
ATOM 12295 N   GLY D 291     8.566 79.374 82.686 1.00 27.90      N
ATOM 12297 CA  GLY D 291     9.396 80.402 82.090 1.00 28.23      C
ATOM 12300 C   GLY D 291    10.813 80.395 82.622 1.00 28.44      C
ATOM 12301 O   GLY D 291    11.585 81.323 82.353 1.00 28.97      O
ATOM 12302 N   PHE D 292    11.153 79.359 83.390 1.00 28.38      N
ATOM 12304 CA  PHE D 292    12.541 79.097 83.782 1.00 28.34      C
ATOM 12306 CB  PHE D 292    12.582 78.421 85.153 1.00 28.26      C
ATOM 12309 CG  PHE D 292    13.969 78.304 85.731 1.00 28.51      C
ATOM 12310 CD1 PHE D 292    14.585 79.403 86.346 1.00 29.08      C
ATOM 12312 CE1 PHE D 292    15.864 79.289 86.895 1.00 29.07      C
ATOM 12314 CZ  PHE D 292    16.528 78.066 86.840 1.00 29.24      C
ATOM 12316 CE2 PHE D 292    15.913 76.964 86.240 1.00 28.66      C
ATOM 12318 CD2 PHE D 292    14.644 77.089 85.698 1.00 28.29      C
ATOM 12320 C   PHE D 292    13.219 78.216 82.691 1.00 28.38      C
ATOM 12321 O   PHE D 292    14.393 78.434 82.310 1.00 28.41      O
ATOM 12322 N   LEU D 293    12.476 77.232 82.184 1.00 28.18      N
ATOM 12324 CA  LEU D 293    12.965 76.387 81.080 1.00 28.35      C
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ATOM 12326 CB  LEU D 293    12.044 75.182 80.835 1.00 28.15        C
ATOM 12329 CG  LEU D 293    11.584 74.346 82.039 1.00 28.44        C
ATOM 12331 CD1 LEU D 293    10.516 73.358 81.587 1.00 27.76        C
ATOM 12335 CD2 LEU D 293    12.746 73.629 82.737 1.00 28.24        C
ATOM 12339 C   LEU D 293    13.079 77.204 79.787 1.00 28.33        C
ATOM 12340 O   LEU D 293    13.997 77.010 78.991 1.00 28.19        O
ATOM 12341 N   GLN D 294    12.144 78.141 79.618 1.00 28.46        N
ATOM 12343 CA  GLN D 294    12.107 79.057 78.475 1.00 28.18        C
ATOM 12345 CB  GLN D 294    10.831 79.920 78.570 1.00 28.28        C
ATOM 12348 CG  GLN D 294    10.466 80.703 77.276 1.00 27.59        C
ATOM 12351 CD  GLN D 294    10.260 82.221 77.500 1.00 27.61        C
ATOM 12352 OE1 GLN D 294     9.567 82.632 78.443 1.00 27.74        O
ATOM 12353 NE2 GLN D 294    10.861 83.053 76.639 1.00 26.90        N
ATOM 12356 C   GLN D 294    13.353 79.970 78.391 1.00 28.23        C
ATOM 12357 O   GLN D 294    13.645 80.540 77.318 1.00 28.13        O
ATOM 12358 N   LEU D 295    14.060 80.109 79.540 1.00 28.25        N
ATOM 12360 CA  LEU D 295    15.302 80.897 79.636 1.00 28.11        C
ATOM 12362 CB  LEU D 295    15.630 81.226 81.121 1.00 28.04        C
ATOM 12365 CG  LEU D 295    15.554 82.709 81.532 1.00 28.57        C
ATOM 12367 CD1 LEU D 295    15.640 82.876 83.056 1.00 28.80        C
ATOM 12371 CD2 LEU D 295    16.640 83.533 80.833 1.00 28.63        C
ATOM 12375 C   LEU D 295    16.495 80.163 78.975 1.00 27.70        C
ATOM 12376 O   LEU D 295    16.357 79.018 78.529 1.00 27.52        O
ATOM 12377 N   GLY D 296    17.653 80.835 78.927 1.00 27.22        N
ATOM 12379 CA  GLY D 296    18.927 80.182 78.639 1.00 26.39        C
ATOM 12382 C   GLY D 296    19.314 79.225 79.784 1.00 26.06        C
ATOM 12383 O   GLY D 296    18.913 79.434 80.958 1.00 25.82        O
ATOM 12384 N   ARG D 297    20.097 78.188 79.461 1.00 25.25        N
ATOM 12386 CA  ARG D 297    20.495 77.161 80.443 1.00 24.86        C
ATOM 12388 CB  ARG D 297    20.919 75.865 79.734 1.00 24.84        C
ATOM 12391 CG  ARG D 297    20.364 74.576 80.346 1.00 24.74        C
ATOM 12394 CD  ARG D 297    20.206 73.445 79.331 1.00 24.92        C
ATOM 12397 NE  ARG D 297    21.310 73.414 78.361 1.00 24.99        N
ATOM 12399 CZ  ARG D 297    21.184 73.382 77.030 1.00 25.02        C
ATOM 12400 NH1 ARG D 297    19.992 73.368 76.439 1.00 25.26        N
ATOM 12403 NH2 ARG D 297    22.277 73.358 76.274 1.00 25.43        N
ATOM 12406 C   ARG D 297    21.628 77.648 81.360 1.00 24.55        C
ATOM 12407 O   ARG D 297    21.660 77.313 82.548 1.00 24.58        O
ATOM 12408 N   GLU D 298    22.557 78.433 80.812 1.00 24.01        N
ATOM 12410 CA  GLU D 298    23.584 79.090 81.631 1.00 23.59        C
ATOM 12412 CB  GLU D 298    24.625 79.757 80.737 1.00 23.52        C
ATOM 12415 CG  GLU D 298    25.440 78.774 79.907 1.00 23.01        C
ATOM 12418 CD  GLU D 298    26.123 79.421 78.714 1.00 22.51        C
ATOM 12419 OE1 GLU D 298    26.009 80.652 78.552 1.00 22.35        O
ATOM 12420 OE2 GLU D 298    26.781 78.698 77.936 1.00 21.54        O
ATOM 12421 C   GLU D 298    22.934 80.134 82.551 1.00 23.51        C
ATOM 12422 O   GLU D 298    23.381 80.375 83.704 1.00 23.44        O
ATOM 12423 N   ASP D 299    21.862 80.740 82.036 1.00 23.15        N
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ATOM 12425 CA  ASP D 299    21.087 81.711 82.789 1.00 23.01    C
ATOM 12427 CB  ASP D 299    20.078 82.417 81.860 1.00 22.83    C
ATOM 12430 CG  ASP D 299    20.717 83.756 81.142 1.00 22.93    C
ATOM 12431 OD1 ASP D 299    21.119 84.501 82.342 1.00 24.43    O
ATOM 12432 OD2 ASP D 299    20.873 84.135 79.437 1.00 21.52    O
ATOM 12433 C   ASP D 299    20.400 81.101 84.024 1.00 22.79    C
ATOM 12434 O   ASP D 299    20.202 81.793 85.039 1.00 23.01    O
ATOM 12435 N   GLN D 300    20.054 79.811 83.940 1.00 22.49    N
ATOM 12437 CA  GLN D 300    19.496 79.076 85.083 1.00 22.30    C
ATOM 12439 CB  GLN D 300    18.956 77.720 84.632 1.00 22.53    C
ATOM 12442 CG  GLN D 300    17.777 77.794 83.684 1.00 22.81    C
ATOM 12445 CD  GLN D 300    17.348 76.352 83.232 1.00 25.00    C
ATOM 12446 OE1 GLN D 300    16.161 76.074 82.932 1.00 27.61    O
ATOM 12447 NE2 GLN D 300    18.313 75.420 83.157 1.00 25.87    N
ATOM 12450 C   GLN D 300    20.536 78.854 86.178 1.00 21.65    C
ATOM 12451 O   GLN D 300    20.199 78.809 87.344 1.00 21.44    O
ATOM 12452 N   ILE D 301    21.798 78.693 85.784 1.00 21.29    N
ATOM 12454 CA  ILE D 301    22.893 78.486 86.741 1.00 20.83    C
ATOM 12456 CB  ILE D 301    24.200 78.063 86.008 1.00 20.65    C
ATOM 12458 CG1 ILE D 301    23.997 76.768 85.199 1.00 20.83    C
ATOM 12461 CD1 ILE D 301    25.057 76.532 84.117 1.00 20.59    C
ATOM 12465 CG2 ILE D 301    25.344 77.879 87.008 1.00 20.52    C
ATOM 12469 C   ILE D 301    23.169 79.726 87.656 1.00 20.35    C
ATOM 12470 O   ILE D 301    23.414 79.554 88.840 1.00 19.89    O
ATOM 12471 N   ALA D 302    23.153 80.954 87.093 1.00 20.19    N
ATOM 12473 CA  ALA D 302    23.590 82.168 87.805 1.00 19.63    C
ATOM 12475 CB  ALA D 302    23.850 83.284 86.808 1.00 20.06    C
ATOM 12479 C   ALA D 302    22.517 82.597 88.812 1.00 20.17    C
ATOM 12480 O   ALA D 302    22.805 83.014 89.994 1.00 19.10    O
ATOM 12481 N   LEU D 303    21.260 82.490 88.324 1.00 19.99    N
ATOM 12483 CA  LEU D 303    20.130 82.780 89.160 1.00 19.26    C
ATOM 12485 CB  LEU D 303    18.812 82.633 88.388 1.00 19.41    C
ATOM 12488 CG  LEU D 303    18.558 83.676 87.275 1.00 19.77    C
ATOM 12490 CD1 LEU D 303    17.155 83.525 86.665 1.00 19.43    C
ATOM 12494 CD2 LEU D 303    18.770 85.100 87.802 1.00 19.37    C
ATOM 12498 C   LEU D 303    20.165 81.826 90.334 1.00 19.62    C
ATOM 12499 O   LEU D 303    19.912 82.255 91.474 1.00 19.24    O
ATOM 12500 N   LEU D 304    20.491 80.549 90.088 1.00 19.36    N
ATOM 12502 CA  LEU D 304    20.432 79.533 91.158 1.00 19.40    C
ATOM 12504 CB  LEU D 304    20.355 78.109 90.596 1.00 19.64    C
ATOM 12507 CG  LEU D 304    18.940 77.536 90.438 1.00 20.03    C
ATOM 12509 CD1 LEU D 304    18.427 77.048 91.768 1.00 20.31    C
ATOM 12513 CD2 LEU D 304    17.963 78.561 89.857 1.00 20.21    C
ATOM 12517 C   LEU D 304    21.592 79.660 92.121 1.00 19.18    C
ATOM 12518 O   LEU D 304    21.411 79.508 93.320 1.00 19.22    O
ATOM 12519 N   LYS D 305    22.771 79.978 91.601 1.00 19.09    N
ATOM 12521 CA  LYS D 305    23.942 80.227 92.449 1.00 19.09    C
ATOM 12523 CB  LYS D 305    25.210 80.469 91.609 1.00 19.03    C
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ATOM 12526 CG  LYS D 305    26.286 79.415 91.827 1.00 19.39        C
ATOM 12529 CD  LYS D 305    27.371 79.478 90.774 1.00 19.76        C
ATOM 12532 CE  LYS D 305    28.747 79.098 91.342 1.00 20.24        C
ATOM 12535 NZ  LYS D 305    29.539 78.242 90.389 1.00 18.52        N
ATOM 12539 C   LYS D 305    23.718 81.390 93.436 1.00 18.96        C
ATOM 12540 O   LYS D 305    24.157 81.307 94.579 1.00 18.44        O
ATOM 12541 N   ALA D 306    23.045 82.459 93.001 1.00 18.73        N
ATOM 12543 CA  ALA D 306    22.747 83.600 93.900 1.00 19.18        C
ATOM 12545 CB  ALA D 306    22.711 84.906 93.108 1.00 19.22        C
ATOM 12549 C   ALA D 306    21.452 83.437 94.724 1.00 18.51        C
ATOM 12550 O   ALA D 306    21.347 83.950 95.826 1.00 18.87        O
ATOM 12551 N   SER D 307    20.507 82.668 94.197 1.00 18.35        N
ATOM 12553 CA  SER D 307    19.182 82.506 94.776 1.00 17.97        C
ATOM 12555 CB  SER D 307    18.174 82.212 93.667 1.00 17.87        C
ATOM 12558 OG  SER D 307    16.940 82.838 93.933 1.00 19.67        O
ATOM 12560 C   SER D 307    19.044 81.407 95.835 1.00 17.63        C
ATOM 12561 O   SER D 307    18.158 81.512 96.717 1.00 17.83        O
ATOM 12562 N   THR D 308    19.881 80.364 95.764 1.00 16.65        N
ATOM 12564 CA  THR D 308    19.637 79.138 96.530 1.00 15.86        C
ATOM 12566 CB  THR D 308    20.696 78.051 96.243 1.00 16.18        C
ATOM 12568 OG1 THR D 308    20.625 77.615 94.870 1.00 14.34        O
ATOM 12570 CG2 THR D 308    20.400 76.778 97.078 1.00 15.13        C
ATOM 12574 C   THR D 308    19.590 79.414 98.026 1.00 15.93        C
ATOM 12575 O   THR D 308    18.659 78.989 98.700 1.00 16.03        O
ATOM 12576 N   ILE D 309    20.586 80.136 98.531 1.00 15.72        N
ATOM 12578 CA  ILE D 309    20.639 80.508 99.940 1.00 15.67        C
ATOM 12580 CB  ILE D 309    21.986 81.201 100.304 1.00 15.54       C
ATOM 12582 CG1 ILE D 309    22.150 81.320 101.835 1.00 16.29       C
ATOM 12585 CD1 ILE D 309    22.250 79.976 102.561 1.00 17.20       C
ATOM 12589 CG2 ILE D 309    22.080 82.580 99.689 1.00 15.04        C
ATOM 12593 C   ILE D 309    19.447 81.382 100.337 1.00 15.85       C
ATOM 12594 O   ILE D 309    18.935 81.268 101.436 1.00 15.28       O
ATOM 12595 N   GLU D 310    19.000 82.252 99.445 1.00 16.15        N
ATOM 12597 CA  GLU D 310    17.871 83.116 99.775 1.00 16.39        C
ATOM 12599 CB  GLU D 310    17.709 84.213 98.740 1.00 16.24        C
ATOM 12602 CG  GLU D 310    18.863 85.197 98.770 1.00 16.79        C
ATOM 12605 CD  GLU D 310    18.715 86.298 97.733 1.00 19.76        C
ATOM 12606 OE1 GLU D 310    17.562 86.586 97.321 1.00 20.43        O
ATOM 12607 OE2 GLU D 310    19.752 86.874 97.318 1.00 21.53        O
ATOM 12608 C   GLU D 310    16.581 82.319 99.929 1.00 16.61        C
ATOM 12609 O   GLU D 310    15.795 82.597 100.825 1.00 16.54       O
ATOM 12610 N   ILE D 311    16.383 81.311 99.077 1.00 16.88        N
ATOM 12612 CA  ILE D 311    15.196 80.455 99.138 1.00 16.43        C
ATOM 12614 CB  ILE D 311    15.024 79.642 97.822 1.00 16.32        C
ATOM 12616 CG1 ILE D 311    14.906 80.573 96.617 1.00 17.54        C
ATOM 12619 CD1 ILE D 311    15.328 79.946 95.329 1.00 18.82        C
ATOM 12623 CG2 ILE D 311    13.786 78.745 97.905 1.00 15.41        C
ATOM 12627 C   ILE D 311    15.282 79.505 100.327 1.00 16.25       C
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ATOM 12628 O   ILE D 311   14.278 79.180 100.937 1.00 16.16        O
ATOM 12629 N   MET D 312   16.487 79.047 100.640 1.00 16.61        N
ATOM 12631 CA  MET D 312   16.723 78.240 101.845 1.00 16.86        C
ATOM 12633 CB  MET D 312   18.201 77.871 101.954 1.00 17.19        C
ATOM 12636 CG  MET D 312   18.607 76.768 101.012 1.00 18.43        C
ATOM 12639 SD  MET D 312   20.289 76.170 101.289 1.00 22.20        S
ATOM 12640 CE  MET D 312   20.250 75.803 103.019 1.00 18.61        C
ATOM 12644 C   MET D 312   16.317 79.033 103.068 1.00 16.07        C
ATOM 12645 O   MET D 312   15.593 78.551 103.911 1.00 14.90        O
ATOM 12646 N   LEU D 313   16.768 80.280 103.139 1.00 16.68        N
ATOM 12648 CA  LEU D 313   16.365 81.180 104.223 1.00 17.04        C
ATOM 12650 CB  LEU D 313   17.053 82.525 104.083 1.00 16.94        C
ATOM 12653 CG  LEU D 313   18.547 82.513 104.400 1.00 17.76        C
ATOM 12655 CD1 LEU D 313   19.208 83.823 103.952 1.00 18.34        C
ATOM 12659 CD2 LEU D 313   18.804 82.280 105.860 1.00 19.95        C
ATOM 12663 C   LEU D 313   14.857 81.362 104.305 1.00 16.87        C
ATOM 12664 O   LEU D 313   14.275 81.284 105.387 1.00 17.55        O
ATOM 12665 N   LEU D 314   14.225 81.577 103.168 1.00 17.10        N
ATOM 12667 CA  LEU D 314   12.757 81.688 103.099 1.00 17.60        C
ATOM 12669 CB  LEU D 314   12.306 81.977 101.652 1.00 17.58        C
ATOM 12672 CG  LEU D 314   11.507 83.203 101.229 1.00 17.28        C
ATOM 12674 CD1 LEU D 314   11.771 84.414 102.058 1.00 18.29        C
ATOM 12678 CD2 LEU D 314   11.791 83.517 99.748 1.00 18.10         C
ATOM 12682 C   LEU D 314   12.072 80.418 103.610 1.00 18.05        C
ATOM 12683 O   LEU D 314   11.095 80.498 104.351 1.00 17.73        O
ATOM 12684 N   GLU D 315   12.580 79.244 103.217 1.00 19.15        N
ATOM 12686 CA  GLU D 315   11.977 77.967 103.648 1.00 19.85        C
ATOM 12688 CB  GLU D 315   12.464 76.794 102.804 1.00 20.52        C
ATOM 12691 CG  GLU D 315   11.828 76.749 101.427 1.00 24.01        C
ATOM 12694 CD  GLU D 315   10.377 76.299 101.474 1.00 28.61        C
ATOM 12695 OE1 GLU D 315   10.126 75.141 101.884 1.00 29.90        O
ATOM 12696 OE2 GLU D 315   9.490 77.112 101.095 1.00 32.59         O
ATOM 12697 C   GLU D 315   12.244 77.696 105.119 1.00 18.94        C
ATOM 12698 O   GLU D 315   11.438 77.062 105.804 1.00 18.93        O
ATOM 12699 N   THR D 316   13.377 78.171 105.588 1.00 18.70        N
ATOM 12701 CA  THR D 316   13.721 78.126 107.005 1.00 19.28        C
ATOM 12703 CB  THR D 316   15.175 78.587 107.158 1.00 19.77        C
ATOM 12705 OG1 THR D 316   16.031 77.580 106.594 1.00 18.05        O
ATOM 12707 CG2 THR D 316   15.596 78.680 108.618 1.00 19.73        C
ATOM 12711 C   THR D 316   12.750 78.964 107.855 1.00 19.13        C
ATOM 12712 O   THR D 316   12.172 78.466 108.816 1.00 18.48        O
ATOM 12713 N   ALA D 317   12.519 80.216 107.457 1.00 19.55        N
ATOM 12715 CA  ALA D 317   11.505 81.056 108.120 1.00 19.26        C
ATOM 12717 CB  ALA D 317   11.361 82.387 107.407 1.00 19.52        C
ATOM 12721 C   ALA D 317   10.144 80.373 108.195 1.00 19.33        C
ATOM 12722 O   ALA D 317   9.431 80.420 109.214 1.00 19.73         O
ATOM 12723 N   ARG D 318   9.769 79.737 107.106 1.00 18.89         N
ATOM 12725 CA  ARG D 318   8.474 79.086 107.014 1.00 18.75         C
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ATOM 12727 CB  ARG D 318    8.355 78.550 105.601 1.00 19.48        C
ATOM 12730 CG  ARG D 318    7.035 78.003 105.174 1.00 21.64        C
ATOM 12733 CD  ARG D 318    7.104 77.675 103.715 1.00 23.82        C
ATOM 12736 NE  ARG D 318    5.902 77.083 103.171 1.00 26.12        N
ATOM 12738 CZ  ARG D 318    5.640 77.042 101.869 1.00 29.28        C
ATOM 12739 NH1 ARG D 318    6.506 77.561 101.002 1.00 30.16        N
ATOM 12742 NH2 ARG D 318    4.522 76.474 101.415 1.00 30.77        N
ATOM 12745 C   ARG D 318    8.358 77.954 108.039 1.00 18.09        C
ATOM 12746 O   ARG D 318    7.266 77.599 108.475 1.00 16.87        O
ATOM 12747 N   ARG D 319    9.507 77.404 108.429 1.00 17.86        N
ATOM 12749 CA  ARG D 319    9.566 76.289 109.364 1.00 18.17        C
ATOM 12751 CB  ARG D 319   10.649 75.314 108.919 1.00 18.45        C
ATOM 12754 CG  ARG D 319   10.297 74.581 107.673 1.00 19.65        C
ATOM 12757 CD  ARG D 319   11.499 74.167 106.866 1.00 23.75        C
ATOM 12760 NE  ARG D 319   11.108 73.800 105.512 1.00 26.57        N
ATOM 12762 CZ  ARG D 319   10.545 72.656 105.185 1.00 27.80        C
ATOM 12763 NH1 ARG D 319   10.311 71.720 106.116 1.00 29.91        N
ATOM 12766 NH2 ARG D 319   10.221 72.434 103.915 1.00 28.11        N
ATOM 12769 C   ARG D 319    9.817 76.724 110.810 1.00 17.72        C
ATOM 12770 O   ARG D 319    9.992 75.879 111.699 1.00 17.32        O
ATOM 12771 N   TYR D 320    9.826 78.033 111.018 1.00 17.56        N
ATOM 12773 CA  TYR D 320   10.042 78.645 112.320 1.00 17.83        C
ATOM 12775 CB  TYR D 320   10.654 80.049 112.176 1.00 17.57        C
ATOM 12778 CG  TYR D 320   10.784 80.749 113.519 1.00 18.20        C
ATOM 12779 CD1 TYR D 320   11.774 80.365 114.439 1.00 15.63        C
ATOM 12781 CE1 TYR D 320   11.861 80.966 115.671 1.00 15.30        C
ATOM 12783 CZ  TYR D 320   10.978 81.978 116.006 1.00 16.00        C
ATOM 12784 OH  TYR D 320   11.058 82.594 117.233 1.00 14.76        O
ATOM 12786 CE2 TYR D 320    9.993 82.375 115.115 1.00 17.33        C
ATOM 12788 CD2 TYR D 320    9.903 81.760 113.884 1.00 17.19        C
ATOM 12790 C   TYR D 320    8.709 78.737 113.041 1.00 17.54        C
ATOM 12791 O   TYR D 320    7.737 79.266 112.524 1.00 17.94        O
ATOM 12792 N   ASN D 321    8.672 78.219 114.244 1.00 17.45        N
ATOM 12794 CA  ASN D 321    7.494 78.300 115.089 1.00 17.31        C
ATOM 12796 CB  ASN D 321    7.158 76.904 115.569 1.00 17.19        C
ATOM 12799 CG  ASN D 321    6.001 76.875 116.523 1.00 16.67        C
ATOM 12800 OD1 ASN D 321    5.298 77.873 116.718 1.00 15.79        O
ATOM 12801 ND2 ASN D 321    5.789 75.719 117.120 1.00 13.63        N
ATOM 12804 C   ASN D 321    7.801 79.192 116.276 1.00 17.26        C
ATOM 12805 O   ASN D 321    8.603 78.820 117.103 1.00 16.90        O
ATOM 12806 N   HIS D 322    7.166 80.359 116.364 1.00 18.26        N
ATOM 12808 CA  HIS D 322    7.507 81.321 117.422 1.00 18.58        C
ATOM 12810 CB  HIS D 322    6.952 82.690 117.149 1.00 18.38        C
ATOM 12813 CG  HIS D 322    7.573 83.736 118.016 1.00 18.54        C
ATOM 12814 ND1 HIS D 322    8.931 83.944 118.042 1.00 14.77        N
ATOM 12816 CE1 HIS D 322    9.203 84.920 118.890 1.00 19.42        C
ATOM 12818 NE2 HIS D 322    8.078 85.310 119.460 1.00 19.88        N
ATOM 12820 CD2 HIS D 322    7.039 84.585 118.927 1.00 18.75        C
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ATOM 12822 C   HIS D 322    7.079 80.954 118.828 1.00 19.14      C
ATOM 12823 O   HIS D 322    7.558 81.530 119.809 1.00 19.70      O
ATOM 12824 N   GLU D 323    6.177 79.993 118.917 1.00 19.44      N
ATOM 12826 CA  GLU D 323    5.685 79.515 120.184 1.00 19.41      C
ATOM 12828 CB  GLU D 323    4.369 78.785 119.928 1.00 19.69      C
ATOM 12831 CG  GLU D 323    3.844 77.968 121.091 1.00 23.22      C
ATOM 12834 CD  GLU D 323    2.563 77.236 120.744 1.00 27.15      C
ATOM 12835 OE1 GLU D 323    2.139 77.295 119.548 1.00 27.89      O
ATOM 12836 OE2 GLU D 323    1.996 76.598 121.673 1.00 30.38      O
ATOM 12837 C   GLU D 323    6.752 78.637 120.882 1.00 18.75      C
ATOM 12838 O   GLU D 323    6.805 78.581 122.096 1.00 18.35      O
ATOM 12839 N   THR D 324    7.590 77.956 120.106 1.00 18.60      N
ATOM 12841 CA  THR D 324    8.732 77.183 120.635 1.00 17.91      C
ATOM 12843 CB  THR D 324    8.750 75.802 119.996 1.00 17.80      C
ATOM 12845 OG1 THR D 324    8.911 75.915 118.574 1.00 17.11      O
ATOM 12847 CG2 THR D 324    7.400 75.115 120.160 1.00 18.66      C
ATOM 12851 C   THR D 324   10.097 77.870 120.380 1.00 17.80      C
ATOM 12852 O   THR D 324   11.111 77.479 120.948 1.00 17.48      O
ATOM 12853 N   GLU D 325   10.090 78.914 119.555 1.00 17.57      N
ATOM 12855 CA  GLU D 325   11.300 79.501 118.966 1.00 17.83      C
ATOM 12857 CB  GLU D 325   12.027 80.386 119.981 1.00 17.92      C
ATOM 12860 CG  GLU D 325   11.079 81.131 120.904 1.00 18.28      C
ATOM 12863 CD  GLU D 325   11.738 82.251 121.674 1.00 19.69      C
ATOM 12864 OE1 GLU D 325   12.984 82.272 121.804 1.00 20.99      O
ATOM 12865 OE2 GLU D 325   10.994 83.139 122.121 1.00 21.52      O
ATOM 12866 C   GLU D 325   12.240 78.474 118.319 1.00 18.09      C
ATOM 12867 O   GLU D 325   13.469 78.631 118.335 1.00 18.16      O
ATOM 12868 N   CYS D 326   11.647 77.437 117.720 1.00 18.28      N
ATOM 12870 CA  CYS D 326   12.401 76.410 117.007 1.00 17.91      C
ATOM 12872 CB  CYS D 326   12.150 75.051 117.624 1.00 17.92      C
ATOM 12875 SG  CYS D 326   12.649 74.925 119.344 1.00 18.22      S
ATOM 12876 C   CYS D 326   12.054 76.338 115.519 1.00 17.96      C
ATOM 12877 O   CYS D 326   10.944 76.665 115.101 1.00 18.19      O
ATOM 12878 N   ILE D 327   13.034 75.888 114.742 1.00 17.75      N
ATOM 12880 CA  ILE D 327   12.900 75.613 113.323 1.00 17.34      C
ATOM 12882 CB  ILE D 327   14.136 76.136 112.612 1.00 17.02      C
ATOM 12884 CG1 ILE D 327   14.286 77.628 112.899 1.00 17.08      C
ATOM 12887 CD1 ILE D 327   15.587 78.220 112.465 1.00 17.70      C
ATOM 12891 CG2 ILE D 327   14.025 75.866 111.136 1.00 17.70      C
ATOM 12895 C   ILE D 327   12.763 74.097 113.070 1.00 17.29      C
ATOM 12896 O   ILE D 327   13.614 73.329 113.483 1.00 17.13      O
ATOM 12897 N   THR D 328   11.699 73.675 112.392 1.00 16.97      N
ATOM 12899 CA  THR D 328   11.520 72.276 112.073 1.00 17.07      C
ATOM 12901 CB  THR D 328   10.077 71.848 112.382 1.00 17.04      C
ATOM 12903 OG1 THR D 328    9.910 71.755 113.810 1.00 18.69      O
ATOM 12905 CG2 THR D 328    9.811 70.421 111.928 1.00 17.50      C
ATOM 12909 C   THR D 328   11.915 71.941 110.625 1.00 17.06      C
ATOM 12910 O   THR D 328   11.235 72.336 109.689 1.00 16.34      O
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ATOM 12911 N   PHE D 329    13.025 71.215 110.464 1.00 16.80    N
ATOM 12913 CA  PHE D 329    13.433 70.649 109.163 1.00 16.73    C
ATOM 12915 CB  PHE D 329    14.947 70.610 109.061 1.00 16.33    C
ATOM 12918 CG  PHE D 329    15.599 71.944 109.248 1.00 16.35    C
ATOM 12919 CD1 PHE D 329    16.548 72.131 110.232 1.00 16.46    C
ATOM 12921 CE1 PHE D 329    17.153 73.366 110.407 1.00 17.18    C
ATOM 12923 CZ  PHE D 329    16.793 74.444 109.601 1.00 16.19    C
ATOM 12925 CE2 PHE D 329    15.846 74.276 108.617 1.00 16.57    C
ATOM 12927 CD2 PHE D 329    15.250 73.029 108.437 1.00 17.38    C
ATOM 12929 C   PHE D 329    12.855 69.231 108.981 1.00 16.91    C
ATOM 12930 O   PHE D 329    12.749 68.487 109.939 1.00 16.26    O
ATOM 12931 N   LEU D 330    12.446 68.891 107.758 1.00 17.66    N
ATOM 12933 CA  LEU D 330    11.826 67.595 107.464 1.00 18.92    C
ATOM 12935 CB  LEU D 330    12.834 66.430 107.679 1.00 18.97    C
ATOM 12938 CG  LEU D 330    14.223 66.578 107.022 1.00 19.75    C
ATOM 12940 CD1 LEU D 330    14.981 65.279 107.018 1.00 21.17    C
ATOM 12944 CD2 LEU D 330    14.125 67.091 105.588 1.00 21.19    C
ATOM 12948 C   LEU D 330    10.506 67.396 108.233 1.00 19.73    C
ATOM 12949 O   LEU D 330     9.634 68.249 108.180 1.00 19.79    O
ATOM 12950 N   LYS D 331    10.335 66.262 108.905 1.00 21.46    N
ATOM 12952 CA  LYS D 331     9.118 66.001 109.669 1.00 22.37    C
ATOM 12954 CB  LYS D 331     8.794 64.494 109.636 1.00 22.37    C
ATOM 12957 CG  LYS D 331     7.361 64.127 110.081 1.00 22.45    C
ATOM 12960 CD  LYS D 331     7.120 62.615 110.109 1.00 23.00    C
ATOM 12963 CE  LYS D 331     5.755 62.248 110.728 1.00 23.00    C
ATOM 12966 NZ  LYS D 331     5.570 60.770 110.919 1.00 20.66    N
ATOM 12970 C   LYS D 331     9.300 66.503 111.106 1.00 23.16    C
ATOM 12971 O   LYS D 331     8.596 67.404 111.550 1.00 24.15    O
ATOM 12972 N   ASP D 332    10.292 65.945 111.797 1.00 24.04    N
ATOM 12974 CA  ASP D 332    10.420 66.028 113.263 1.00 24.26    C
ATOM 12976 CB  ASP D 332    10.373 64.604 113.875 1.00 24.72    C
ATOM 12979 CG  ASP D 332     9.113 63.836 113.527 1.00 26.74    C
ATOM 12980 OD1 ASP D 332     8.089 63.993 114.237 1.00 30.75    O
ATOM 12981 OD2 ASP D 332     9.063 63.013 112.588 1.00 29.44    O
ATOM 12982 C   ASP D 332    11.735 66.653 113.749 1.00 23.27    C
ATOM 12983 O   ASP D 332    11.973 66.685 114.952 1.00 23.21    O
ATOM 12984 N   PHE D 333    12.612 67.078 112.842 1.00 22.47    N
ATOM 12986 CA  PHE D 333    13.938 67.558 113.247 1.00 21.94    C
ATOM 12988 CB  PHE D 333    14.982 67.321 112.140 1.00 21.90    C
ATOM 12991 CG  PHE D 333    15.239 65.857 111.836 1.00 21.19    C
ATOM 12992 CD1 PHE D 333    15.286 65.397 110.526 1.00 22.30    C
ATOM 12994 CE1 PHE D 333    15.531 64.027 110.248 1.00 21.21    C
ATOM 12996 CZ  PHE D 333    15.736 63.149 111.279 1.00 20.04    C
ATOM 12998 CE2 PHE D 333    15.705 63.600 112.586 1.00 20.23    C
ATOM 13000 CD2 PHE D 333    15.456 64.941 112.860 1.00 21.17    C
ATOM 13002 C   PHE D 333    13.851 69.032 113.657 1.00 21.78    C
ATOM 13003 O   PHE D 333    13.855 69.928 112.817 1.00 21.60    O
ATOM 13004 N   THR D 334    13.746 69.264 114.966 1.00 21.52    N
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| ATOM | 13006 | CA | THR D 334 | 13.354 | 70.566 | 115.523 | 1.00 | 21.15 | C |
|------|-------|------|-----------|--------|--------|---------|------|-------|---|
| ATOM | 13008 | CB | THR D 334 | 12.076 | 70.373 | 116.346 | 1.00 | 21.06 | C |
| ATOM | 13010 | OG1 | THR D 334 | 11.013 | 70.024 | 115.458 | 1.00 | 22.39 | O |
| ATOM | 13012 | CG2 | THR D 334 | 11.601 | 71.667 | 117.000 | 1.00 | 20.50 | C |
| ATOM | 13016 | C | THR D 334 | 14.473 | 71.119 | 116.391 | 1.00 | 20.64 | C |
| ATOM | 13017 | O | THR D 334 | 14.993 | 70.410 | 117.256 | 1.00 | 21.61 | O |
| ATOM | 13018 | N | TYR D 335 | 14.821 | 72.382 | 116.174 | 1.00 | 19.47 | N |
| ATOM | 13020 | CA | TYR D 335 | 16.045 | 72.956 | 116.709 | 1.00 | 18.85 | C |
| ATOM | 13022 | CB | TYR D 335 | 17.151 | 72.911 | 115.633 | 1.00 | 18.58 | C |
| ATOM | 13025 | CG | TYR D 335 | 17.442 | 71.498 | 115.222 | 1.00 | 19.49 | C |
| ATOM | 13026 | CD1 | TYR D 335 | 17.247 | 71.067 | 113.926 | 1.00 | 18.92 | C |
| ATOM | 13028 | CE1 | TYR D 335 | 17.492 | 69.744 | 113.583 | 1.00 | 20.64 | C |
| ATOM | 13030 | CZ | TYR D 335 | 17.918 | 68.850 | 114.547 | 1.00 | 18.93 | C |
| ATOM | 13031 | OH | TYR D 335 | 18.156 | 67.535 | 114.226 | 1.00 | 22.78 | O |
| ATOM | 13033 | CE2 | TYR D 335 | 18.106 | 69.255 | 115.831 | 1.00 | 19.01 | C |
| ATOM | 13035 | CD2 | TYR D 335 | 17.863 | 70.559 | 116.173 | 1.00 | 20.56 | C |
| ATOM | 13037 | C | TYR D 335 | 15.864 | 74.383 | 117.184 | 1.00 | 17.90 | C |
| ATOM | 13038 | O | TYR D 335 | 15.299 | 75.200 | 116.469 | 1.00 | 17.11 | O |
| ATOM | 13039 | N | SER D 336 | 16.361 | 74.656 | 118.388 | 1.00 | 17.04 | N |
| ATOM | 13041 | CA | SER D 336 | 16.422 | 76.008 | 118.966 | 1.00 | 16.74 | C |
| ATOM | 13043 | CB | SER D 336 | 16.370 | 75.896 | 120.488 | 1.00 | 16.83 | C |
| ATOM | 13046 | OG | SER D 336 | 17.539 | 75.217 | 120.966 | 1.00 | 15.76 | O |
| ATOM | 13048 | C | SER D 336 | 17.738 | 76.715 | 118.596 | 1.00 | 16.17 | C |
| ATOM | 13049 | O | SER D 336 | 18.640 | 76.105 | 118.069 | 1.00 | 14.89 | O |
| ATOM | 13050 | N | LYS D 337 | 17.841 | 78.005 | 118.892 | 1.00 | 16.72 | N |
| ATOM | 13052 | CA | LYS D 337 | 19.128 | 78.708 | 118.826 | 1.00 | 17.06 | C |
| ATOM | 13054 | CB | LYS D 337 | 19.050 | 80.027 | 119.578 | 1.00 | 16.51 | C |
| ATOM | 13057 | CG | LYS D 337 | 18.776 | 81.191 | 118.672 | 1.00 | 15.93 | C |
| ATOM | 13060 | CD | LYS D 337 | 18.930 | 82.497 | 119.394 | 1.00 | 14.66 | C |
| ATOM | 13063 | CE | LYS D 337 | 18.332 | 83.573 | 118.544 | 1.00 | 15.20 | C |
| ATOM | 13066 | NZ | LYS D 337 | 18.517 | 84.917 | 119.049 | 1.00 | 10.93 | N |
| ATOM | 13070 | C | LYS D 337 | 20.270 | 77.875 | 119.438 | 1.00 | 17.88 | C |
| ATOM | 13071 | O | LYS D 337 | 21.382 | 77.794 | 118.903 | 1.00 | 17.72 | O |
| ATOM | 13072 | N | ASP D 338 | 19.980 | 77.245 | 120.567 | 1.00 | 18.12 | N |
| ATOM | 13074 | CA | ASP D 338 | 21.020 | 76.548 | 121.270 | 1.00 | 18.82 | C |
| ATOM | 13076 | CB | ASP D 338 | 20.553 | 76.052 | 122.634 | 1.00 | 19.01 | C |
| ATOM | 13079 | CG | ASP D 338 | 21.628 | 76.157 | 123.630 | 1.00 | 20.94 | C |
| ATOM | 13080 | OD1 | ASP D 338 | 22.111 | 75.106 | 124.095 | 1.00 | 22.65 | O |
| ATOM | 13081 | OD2 | ASP D 338 | 22.092 | 77.274 | 123.956 | 1.00 | 24.02 | O |
| ATOM | 13082 | C | ASP D 338 | 21.599 | 75.405 | 120.463 | 1.00 | 18.23 | C |
| ATOM | 13083 | O | ASP D 338 | 22.796 | 75.212 | 120.476 | 1.00 | 18.26 | O |
| ATOM | 13084 | N | ASP D 339 | 20.757 | 74.662 | 119.756 | 1.00 | 18.03 | N |
| ATOM | 13086 | CA | ASP D 339 | 21.239 | 73.572 | 118.897 | 1.00 | 17.64 | C |
| ATOM | 13088 | CB | ASP D 339 | 20.076 | 72.795 | 118.327 | 1.00 | 17.74 | C |
| ATOM | 13091 | CG | ASP D 339 | 19.237 | 72.203 | 119.390 | 1.00 | 19.52 | C |
| ATOM | 13092 | OD1 | ASP D 339 | 19.816 | 71.651 | 120.345 | 1.00 | 21.13 | O |
| ATOM | 13093 | OD2 | ASP D 339 | 17.994 | 72.259 | 119.379 | 1.00 | 23.92 | O |
| ATOM | 13094 | C | ASP D 339 | 22.117 | 74.056 | 117.758 | 1.00 | 16.92 | C |

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ATOM 13095 O   ASP D 339    23.059 73.373 117.360 1.00 15.53    O
ATOM 13096 N   PHE D 340    21.819 75.233 117.222 1.00 16.37    N
ATOM 13098 CA  PHE D 340    22.664 75.743 116.153 1.00 16.21    C
ATOM 13100 CB  PHE D 340    21.995 76.888 115.419 1.00 15.86    C
ATOM 13103 CG  PHE D 340    20.819 76.452 114.618 1.00 15.58    C
ATOM 13104 CD1 PHE D 340    19.536 76.601 115.103 1.00 14.28    C
ATOM 13106 CE1 PHE D 340    18.447 76.189 114.357 1.00 13.86    C
ATOM 13108 CZ  PHE D 340    18.628 75.599 113.142 1.00 13.49    C
ATOM 13110 CE2 PHE D 340    19.894 75.423 112.650 1.00 14.38    C
ATOM 13112 CD2 PHE D 340    20.992 75.846 113.389 1.00 15.91    C
ATOM 13114 C   PHE D 340    24.045 76.109 116.658 1.00 16.12    C
ATOM 13115 O   PHE D 340    25.034 75.841 115.995 1.00 16.50    O
ATOM 13116 N   HIS D 341    24.111 76.712 117.834 1.00 16.63    N
ATOM 13118 CA  HIS D 341    25.386 77.143 118.384 1.00 16.82    C
ATOM 13120 CB  HIS D 341    25.219 78.056 119.599 1.00 17.15    C
ATOM 13123 CG  HIS D 341    26.480 78.792 119.946 1.00 19.44    C
ATOM 13124 ND1 HIS D 341    27.128 79.614 119.047 1.00 21.11    N
ATOM 13126 CE1 HIS D 341    28.218 80.105 119.611 1.00 22.20    C
ATOM 13128 NE2 HIS D 341    28.307 79.626 120.839 1.00 21.65    N
ATOM 13130 CD2 HIS D 341    27.240 78.790 121.068 1.00 21.17    C
ATOM 13132 C   HIS D 341    26.231 75.949 118.753 1.00 16.10    C
ATOM 13133 O   HIS D 341    27.440 75.986 118.597 1.00 15.56    O
ATOM 13134 N   ARG D 342    25.571 74.886 119.205 1.00 15.87    N
ATOM 13136 CA  ARG D 342    26.224 73.620 119.568 1.00 16.07    C
ATOM 13138 CB  ARG D 342    25.207 72.687 120.229 1.00 16.05    C
ATOM 13141 CG  ARG D 342    24.788 73.102 121.623 1.00 17.32    C
ATOM 13144 CD  ARG D 342    24.621 71.926 122.539 1.00 21.25    C
ATOM 13147 NE  ARG D 342    23.364 71.878 123.275 1.00 23.52    N
ATOM 13149 CZ  ARG D 342    23.038 70.870 124.098 1.00 25.50    C
ATOM 13150 NH1 ARG D 342    23.869 69.835 124.275 1.00 24.03    N
ATOM 13153 NH2 ARG D 342    21.877 70.897 124.752 1.00 26.29    N
ATOM 13156 C   ARG D 342    26.868 72.879 118.378 1.00 15.73    C
ATOM 13157 O   ARG D 342    27.777 72.055 118.571 1.00 15.89    O
ATOM 13158 N   ALA D 343    26.367 73.143 117.170 1.00 15.13    N
ATOM 13160 CA  ALA D 343    26.960 72.634 115.929 1.00 15.14    C
ATOM 13162 CB  ALA D 343    25.902 72.529 114.834 1.00 15.08    C
ATOM 13166 C   ALA D 343    28.113 73.519 115.449 1.00 14.86    C
ATOM 13167 O   ALA D 343    28.660 73.303 114.386 1.00 14.33    O
ATOM 13168 N   GLY D 344    28.441 74.547 116.214 1.00 15.18    N
ATOM 13170 CA  GLY D 344    29.626 75.336 115.959 1.00 15.39    C
ATOM 13173 C   GLY D 344    29.379 76.548 115.109 1.00 15.41    C
ATOM 13174 O   GLY D 344    30.318 77.254 114.767 1.00 15.98    O
ATOM 13175 N   LEU D 345    28.127 76.801 114.763 1.00 15.74    N
ATOM 13177 CA  LEU D 345    27.800 77.972 113.955 1.00 16.56    C
ATOM 13179 CB  LEU D 345    26.405 77.838 113.337 1.00 16.66    C
ATOM 13182 CG  LEU D 345    26.208 76.577 112.502 1.00 17.17    C
ATOM 13184 CD1 LEU D 345    24.875 76.607 111.832 1.00 17.49    C
ATOM 13188 CD2 LEU D 345    27.314 76.427 111.457 1.00 19.65    C
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ATOM 13192 C   LEU D 345    27.912 79.257 114.784 1.00 16.89    C
ATOM 13193 O   LEU D 345    27.621 79.268 115.996 1.00 17.01    O
ATOM 13194 N   GLN D 346    28.342 80.327 114.116 1.00 17.06    N
ATOM 13196 CA  GLN D 346    28.632 81.607 114.760 1.00 17.19    C
ATOM 13198 CB  GLN D 346    29.423 82.522 113.814 1.00 17.60    C
ATOM 13201 CG  GLN D 346    30.644 81.878 113.171 1.00 18.33    C
ATOM 13204 CD  GLN D 346    31.568 81.261 114.198 1.00 20.92    C
ATOM 13205 OE1 GLN D 346    32.017 81.946 115.117 1.00 21.20    O
ATOM 13206 NE2 GLN D 346    31.856 79.963 114.050 1.00 23.47    N
ATOM 13209 C   GLN D 346    27.338 82.297 115.154 1.00 17.01    C
ATOM 13210 O   GLN D 346    26.332 82.137 114.474 1.00 16.46    O
ATOM 13211 N   VAL D 347    27.374 83.062 116.248 1.00 17.07    N
ATOM 13213 CA  VAL D 347    26.223 83.862 116.681 1.00 17.24    C
ATOM 13215 CB  VAL D 347    26.372 84.370 118.164 1.00 17.60    C
ATOM 13217 CG1 VAL D 347    25.872 85.805 118.358 1.00 17.35    C
ATOM 13221 CG2 VAL D 347    25.592 83.430 119.085 1.00 18.18    C
ATOM 13225 C   VAL D 347    25.925 84.985 115.680 1.00 16.88    C
ATOM 13226 O   VAL D 347    24.769 85.279 115.414 1.00 16.62    O
ATOM 13227 N   GLU D 348    26.960 85.555 115.073 1.00 17.02    N
ATOM 13229 CA  GLU D 348    26.776 86.529 113.980 1.00 17.07    C
ATOM 13231 CB  GLU D 348    28.140 86.949 113.415 1.00 17.09    C
ATOM 13234 CG  GLU D 348    28.975 87.801 114.359 1.00 16.95    C
ATOM 13237 CD  GLU D 348    29.917 87.001 115.260 1.00 17.25    C
ATOM 13238 OE1 GLU D 348    29.938 85.753 115.213 1.00 15.66    O
ATOM 13239 OE2 GLU D 348    30.637 87.642 116.048 1.00 17.91    O
ATOM 13240 C   GLU D 348    25.890 86.012 112.820 1.00 17.19    C
ATOM 13241 O   GLU D 348    25.370 86.800 112.015 1.00 17.00    O
ATOM 13242 N   PHE D 349    25.754 84.686 112.733 1.00 17.57    N
ATOM 13244 CA  PHE D 349    24.993 83.991 111.690 1.00 17.56    C
ATOM 13246 CB  PHE D 349    25.837 82.795 111.226 1.00 18.32    C
ATOM 13249 CG  PHE D 349    25.294 82.031 110.029 1.00 22.06    C
ATOM 13250 CD1 PHE D 349    24.759 82.679 108.924 1.00 24.50    C
ATOM 13252 CE1 PHE D 349    24.319 81.950 107.818 1.00 24.67    C
ATOM 13254 CZ  PHE D 349    24.425 80.574 107.808 1.00 25.29    C
ATOM 13256 CE2 PHE D 349    24.965 79.911 108.899 1.00 25.21    C
ATOM 13258 CD2 PHE D 349    25.409 80.632 109.989 1.00 24.56    C
ATOM 13260 C   PHE D 349    23.657 83.539 112.268 1.00 16.59    C
ATOM 13261 O   PHE D 349    22.601 83.689 111.625 1.00 17.28    O
ATOM 13262 N   ILE D 350    23.667 83.033 113.504 1.00 14.79    N
ATOM 13264 CA  ILE D 350    22.426 82.522 114.080 1.00 13.52    C
ATOM 13266 CB  ILE D 350    22.703 81.689 115.349 1.00 13.14    C
ATOM 13268 CG1 ILE D 350    23.477 80.427 115.004 1.00 12.85    C
ATOM 13271 CD1 ILE D 350    24.246 79.916 116.203 1.00 12.77    C
ATOM 13275 CG2 ILE D 350    21.415 81.277 116.076 1.00 11.63    C
ATOM 13279 C   ILE D 350    21.430 83.662 114.365 1.00 13.33    C
ATOM 13280 O   ILE D 350    20.234 83.535 114.069 1.00 12.57    O
ATOM 13281 N   ASN D 351    21.905 84.757 114.959 1.00 12.77    N
ATOM 13283 CA  ASN D 351    20.970 85.791 115.419 1.00 12.60    C

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ATOM 13285 CB  ASN D 351   21.639 86.826 116.351 1.00 11.66      C
ATOM 13288 CG  ASN D 351   21.914 86.250 117.738 1.00 11.41      C
ATOM 13289 OD1 ASN D 351   21.364 85.223 118.101 1.00 11.58      O
ATOM 13290 ND2 ASN D 351   22.777 86.898 118.506 1.00 10.28      N
ATOM 13293 C   ASN D 351   20.175 86.415 114.272 1.00 12.17      C
ATOM 13294 O   ASN D 351   18.971 86.361 114.321 1.00 12.15      O
ATOM 13295 N   PRO D 352   20.811 86.935 113.223 1.00 12.68      N
ATOM 13296 CA  PRO D 352   20.048 87.518 112.090 1.00 12.89      C
ATOM 13298 CB  PRO D 352   21.149 87.956 111.116 1.00 12.57      C
ATOM 13301 CG  PRO D 352   22.367 88.225 112.029 1.00 12.50      C
ATOM 13304 CD  PRO D 352   22.271 87.046 113.004 1.00 12.68      C
ATOM 13307 C   PRO D 352   19.036 86.580 111.399 1.00 13.07      C
ATOM 13308 O   PRO D 352   18.056 87.078 110.891 1.00 13.51      O
ATOM 13309 N   ILE D 353   19.271 85.273 111.360 1.00 14.77      N
ATOM 13311 CA  ILE D 353   18.375 84.337 110.666 1.00 15.44      C
ATOM 13313 CB  ILE D 353   19.061 83.008 110.399 1.00 15.39      C
ATOM 13315 CG1 ILE D 353   20.047 83.132 109.239 1.00 17.58      C
ATOM 13318 CD1 ILE D 353   20.850 81.852 108.991 1.00 18.21      C
ATOM 13322 CG2 ILE D 353   18.073 81.938 110.012 1.00 16.28      C
ATOM 13326 C   ILE D 353   17.139 84.120 111.511 1.00 16.28      C
ATOM 13327 O   ILE D 353   16.029 84.022 110.985 1.00 16.70      O
ATOM 13328 N   PHE D 354   17.338 84.049 112.824 1.00 16.01      N
ATOM 13330 CA  PHE D 354   16.226 83.954 113.731 1.00 16.18      C
ATOM 13332 CB  PHE D 354   16.669 83.566 115.167 1.00 16.26      C
ATOM 13335 CG  PHE D 354   16.669 82.083 115.390 1.00 14.24      C
ATOM 13336 CD1 PHE D 354   17.727 81.308 114.940 1.00 13.74      C
ATOM 13338 CE1 PHE D 354   17.726 79.933 115.104 1.00 14.59      C
ATOM 13340 CZ  PHE D 354   16.637 79.313 115.725 1.00 15.36      C
ATOM 13342 CE2 PHE D 354   15.558 80.077 116.155 1.00 13.49      C
ATOM 13344 CD2 PHE D 354   15.575 81.459 115.969 1.00 14.41      C
ATOM 13346 C   PHE D 354   15.374 85.207 113.695 1.00 16.36      C
ATOM 13347 O   PHE D 354   14.169 85.085 113.682 1.00 16.51      O
ATOM 13348 N   GLU D 355   15.947 86.398 113.631 1.00 17.38      N
ATOM 13350 CA  GLU D 355   15.079 87.570 113.629 1.00 18.65      C
ATOM 13352 CB  GLU D 355   15.769 88.844 114.123 1.00 20.16      C
ATOM 13355 CG  GLU D 355   16.542 89.686 113.143 1.00 23.24      C
ATOM 13358 CD  GLU D 355   17.096 90.915 113.836 1.00 27.30      C
ATOM 13359 OE1 GLU D 355   18.059 90.773 114.611 1.00 32.29      O
ATOM 13360 OE2 GLU D 355   16.566 92.016 113.640 1.00 31.79      O
ATOM 13361 C   GLU D 355   14.411 87.773 112.301 1.00 18.02      C
ATOM 13362 O   GLU D 355   13.314 88.305 112.252 1.00 17.33      O
ATOM 13363 N   PHE D 356   15.048 87.310 111.224 1.00 18.12      N
ATOM 13365 CA  PHE D 356   14.381 87.291 109.929 1.00 17.54      C
ATOM 13367 CB  PHE D 356   15.316 86.833 108.843 1.00 18.10      C
ATOM 13370 CG  PHE D 356   14.651 86.667 107.510 1.00 19.20      C
ATOM 13371 CD1 PHE D 356   14.415 87.763 106.699 1.00 18.84      C
ATOM 13373 CE1 PHE D 356   13.804 87.595 105.438 1.00 19.22      C
ATOM 13375 CZ  PHE D 356   13.439 86.342 105.003 1.00 17.86      C
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| ATOM | 13377 | CE2 | PHE | D | 356 | 13.683 | 85.238 | 105.803 | 1.00 | 20.18 | C |
| ATOM | 13379 | CD2 | PHE | D | 356 | 14.280 | 85.399 | 107.055 | 1.00 | 19.82 | C |
| ATOM | 13381 | C | PHE | D | 356 | 13.177 | 86.371 | 110.011 | 1.00 | 17.21 | C |
| ATOM | 13382 | O | PHE | D | 356 | 12.080 | 86.744 | 109.577 | 1.00 | 16.56 | O |
| ATOM | 13383 | N | SER | D | 357 | 13.374 | 85.197 | 110.614 | 1.00 | 16.08 | N |
| ATOM | 13385 | CA | SER | D | 357 | 12.318 | 84.231 | 110.733 | 1.00 | 16.00 | C |
| ATOM | 13387 | CB | SER | D | 357 | 12.863 | 82.921 | 111.322 | 1.00 | 16.71 | C |
| ATOM | 13390 | OG | SER | D | 357 | 13.823 | 82.288 | 110.449 | 1.00 | 14.50 | O |
| ATOM | 13392 | C | SER | D | 357 | 11.159 | 84.782 | 111.564 | 1.00 | 16.84 | C |
| ATOM | 13393 | O | SER | D | 357 | 9.994 | 84.544 | 111.260 | 1.00 | 16.43 | O |
| ATOM | 13394 | N | ARG | D | 358 | 11.473 | 85.568 | 112.596 | 1.00 | 16.89 | N |
| ATOM | 13396 | CA | ARG | D | 358 | 10.436 | 86.112 | 113.474 | 1.00 | 16.31 | C |
| ATOM | 13398 | CB | ARG | D | 358 | 11.060 | 86.830 | 114.662 | 1.00 | 16.33 | C |
| ATOM | 13401 | CG | ARG | D | 358 | 11.152 | 86.056 | 115.934 | 1.00 | 17.48 | C |
| ATOM | 13404 | CD | ARG | D | 358 | 11.729 | 86.912 | 117.052 | 1.00 | 20.26 | C |
| ATOM | 13407 | NE | ARG | D | 358 | 13.018 | 86.354 | 117.301 | 1.00 | 25.96 | N |
| ATOM | 13409 | CZ | ARG | D | 358 | 14.194 | 86.947 | 117.218 | 1.00 | 22.65 | C |
| ATOM | 13410 | NH1 | ARG | D | 358 | 14.354 | 88.238 | 116.956 | 1.00 | 19.07 | N |
| ATOM | 13413 | NH2 | ARG | D | 358 | 15.242 | 86.175 | 117.439 | 1.00 | 22.42 | N |
| ATOM | 13416 | C | ARG | D | 358 | 9.598 | 87.118 | 112.705 | 1.00 | 16.20 | C |
| ATOM | 13417 | O | ARG | D | 358 | 8.374 | 87.170 | 112.844 | 1.00 | 15.37 | O |
| ATOM | 13418 | N | ALA | D | 359 | 10.269 | 87.947 | 111.920 | 1.00 | 16.45 | N |
| ATOM | 13420 | CA | ALA | D | 359 | 9.580 | 88.987 | 111.148 | 1.00 | 17.28 | C |
| ATOM | 13422 | CB | ALA | D | 359 | 10.582 | 89.941 | 110.512 | 1.00 | 17.05 | C |
| ATOM | 13426 | C | ALA | D | 359 | 8.690 | 88.361 | 110.087 | 1.00 | 17.53 | C |
| ATOM | 13427 | O | ALA | D | 359 | 7.560 | 88.798 | 109.876 | 1.00 | 17.97 | O |
| ATOM | 13428 | N | MET | D | 360 | 9.199 | 87.316 | 109.449 | 1.00 | 18.83 | N |
| ATOM | 13430 | CA | MET | D | 360 | 8.457 | 86.585 | 108.422 | 1.00 | 19.27 | C |
| ATOM | 13432 | CB | MET | D | 360 | 9.323 | 85.473 | 107.835 | 1.00 | 18.85 | C |
| ATOM | 13435 | CG | MET | D | 360 | 10.382 | 85.957 | 106.843 | 1.00 | 18.94 | C |
| ATOM | 13438 | SD | MET | D | 360 | 9.743 | 86.806 | 105.396 | 1.00 | 21.35 | S |
| ATOM | 13439 | CE | MET | D | 360 | 8.502 | 85.627 | 104.774 | 1.00 | 21.00 | C |
| ATOM | 13443 | C | MET | D | 360 | 7.170 | 86.016 | 109.002 | 1.00 | 20.13 | C |
| ATOM | 13444 | O | MET | D | 360 | 6.100 | 86.129 | 108.400 | 1.00 | 18.70 | O |
| ATOM | 13445 | N | ARG | D | 361 | 7.290 | 85.447 | 110.201 | 1.00 | 21.90 | N |
| ATOM | 13447 | CA | ARG | D | 361 | 6.174 | 84.834 | 110.907 | 1.00 | 23.42 | C |
| ATOM | 13449 | CB | ARG | D | 361 | 6.665 | 84.197 | 112.191 | 1.00 | 24.79 | C |
| ATOM | 13452 | CG | ARG | D | 361 | 5.692 | 83.203 | 112.775 | 1.00 | 28.89 | C |
| ATOM | 13455 | CD | ARG | D | 361 | 5.643 | 81.963 | 111.923 | 1.00 | 34.68 | C |
| ATOM | 13458 | NE | ARG | D | 361 | 4.583 | 81.042 | 112.295 | 1.00 | 38.61 | N |
| ATOM | 13460 | CZ | ARG | D | 361 | 4.120 | 80.118 | 111.473 | 1.00 | 42.14 | C |
| ATOM | 13461 | NH1 | ARG | D | 361 | 4.604 | 80.026 | 110.229 | 1.00 | 42.41 | N |
| ATOM | 13464 | NH2 | ARG | D | 361 | 3.158 | 79.289 | 111.888 | 1.00 | 43.94 | N |
| ATOM | 13467 | C | ARG | D | 361 | 5.104 | 85.821 | 111.286 | 1.00 | 23.42 | C |
| ATOM | 13468 | O | ARG | D | 361 | 3.925 | 85.477 | 111.342 | 1.00 | 24.04 | O |
| ATOM | 13469 | N | ARG | D | 362 | 5.513 | 87.049 | 111.563 | 1.00 | 23.68 | N |
| ATOM | 13471 | CA | ARG | D | 362 | 4.559 | 88.113 | 111.885 | 1.00 | 24.21 | C |
| ATOM | 13473 | CB | ARG | D | 362 | 5.279 | 89.325 | 112.489 | 1.00 | 24.12 | C |

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ATOM 13476 CG  ARG D 362      5.563 89.158 113.981 1.00 25.37      C
ATOM 13479 CD  ARG D 362      6.124 90.408 114.669 1.00 26.49      C
ATOM 13482 NE  ARG D 362      7.586 90.354 114.718 1.00 30.15      N
ATOM 13484 CZ  ARG D 362      8.404 91.159 114.060 1.00 31.30      C
ATOM 13485 NH1 ARG D 362      7.928 92.133 113.290 1.00 35.68      N
ATOM 13488 NH2 ARG D 362      9.710 90.997 114.171 1.00 29.73      N
ATOM 13491 C   ARG D 362      3.746 88.544 110.672 1.00 24.10      C
ATOM 13492 O   ARG D 362      2.708 89.182 110.819 1.00 24.95      O
ATOM 13493 N   LEU D 363      4.223 88.234 109.473 1.00 24.23      N
ATOM 13495 CA  LEU D 363      3.463 88.535 108.258 1.00 24.15      C
ATOM 13497 CB  LEU D 363      4.364 88.621 107.041 1.00 24.08      C
ATOM 13500 CG  LEU D 363      5.141 89.911 106.879 1.00 24.30      C
ATOM 13502 CD1 LEU D 363      6.031 89.758 105.676 1.00 25.29      C
ATOM 13506 CD2 LEU D 363      4.207 91.108 106.715 1.00 24.59      C
ATOM 13510 C   LEU D 363      2.373 87.517 107.999 1.00 23.86      C
ATOM 13511 O   LEU D 363      1.339 87.850 107.438 1.00 23.41      O
ATOM 13512 N   GLY D 364      2.617 86.281 108.413 1.00 24.24      N
ATOM 13514 CA  GLY D 364      1.635 85.214 108.287 1.00 24.01      C
ATOM 13517 C   GLY D 364      1.352 84.865 106.846 1.00 23.85      C
ATOM 13518 O   GLY D 364      0.206 84.788 106.464 1.00 24.01      O
ATOM 13519 N   LEU D 365      2.392 84.664 106.046 1.00 24.07      N
ATOM 13521 CA  LEU D 365      2.221 84.279 104.650 1.00 24.58      C
ATOM 13523 CB  LEU D 365      3.551 84.294 103.909 1.00 24.35      C
ATOM 13526 CG  LEU D 365      4.442 85.522 103.945 1.00 25.06      C
ATOM 13528 CD1 LEU D 365      5.344 85.532 102.705 1.00 25.33      C
ATOM 13532 CD2 LEU D 365      3.626 86.776 104.042 1.00 26.01      C
ATOM 13536 C   LEU D 365      1.638 82.874 104.514 1.00 24.93      C
ATOM 13537 O   LEU D 365      2.138 81.940 105.150 1.00 25.34      O
ATOM 13538 N   ASP D 366      0.607 82.718 103.681 1.00 25.11      N
ATOM 13540 CA  ASP D 366      0.110 81.372 103.345 1.00 25.42      C
ATOM 13542 CB  ASP D 366     -1.384 81.354 102.926 1.00 24.99      C
ATOM 13545 CG  ASP D 366     -1.745 82.380 101.854 1.00 25.12      C
ATOM 13546 OD1 ASP D 366     -0.865 82.799 101.070 1.00 24.72      O
ATOM 13547 OD2 ASP D 366     -2.922 82.802 101.710 1.00 23.98      O
ATOM 13548 C   ASP D 366      1.046 80.691 102.330 1.00 25.60      C
ATOM 13549 O   ASP D 366      2.121 81.211 102.031 1.00 25.84      O
ATOM 13550 N   ASP D 367      0.670 79.517 101.838 1.00 25.74      N
ATOM 13552 CA  ASP D 367      1.551 78.763 100.945 1.00 25.71      C
ATOM 13554 CB  ASP D 367      0.983 77.363 100.678 1.00 25.96      C
ATOM 13557 CG  ASP D 367      0.888 76.510 101.927 1.00 25.99      C
ATOM 13558 OD1 ASP D 367      1.788 76.575 102.787 1.00 25.17      O
ATOM 13559 OD2 ASP D 367     -0.069 75.733 102.118 1.00 27.86      O
ATOM 13560 C   ASP D 367      1.730 79.477 99.605 1.00 25.15      C
ATOM 13561 O   ASP D 367      2.827 79.503 99.038 1.00 25.46      O
ATOM 13562 N   ALA D 368      0.641 80.040 99.099 1.00 24.22      N
ATOM 13564 CA  ALA D 368      0.673 80.766 97.833 1.00 23.64      C
ATOM 13566 CB  ALA D 368     -0.708 81.318 97.506 1.00 23.61      C
ATOM 13570 C   ALA D 368      1.681 81.902 97.872 1.00 23.10      C
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ATOM 13571 O   ALA D 368    2.428  82.111  96.905  1.00 23.25    O
ATOM 13572 N   GLU D 369    1.691  82.629  98.990  1.00 22.03    N
ATOM 13574 CA  GLU D 369    2.511  83.816  99.117  1.00 21.31    C
ATOM 13576 CB  GLU D 369    2.104  84.634 100.365  1.00 21.22    C
ATOM 13579 CG  GLU D 369    0.813  85.424 100.102  1.00 20.90    C
ATOM 13582 CD  GLU D 369    0.153  86.072 101.321  1.00 19.79    C
ATOM 13583 OE1 GLU D 369   -0.415  87.168 101.153  1.00 17.89    O
ATOM 13584 OE2 GLU D 369    0.144  85.494 102.423  1.00 17.91    O
ATOM 13585 C   GLU D 369    3.975  83.418  99.081  1.00 20.93    C
ATOM 13586 O   GLU D 369    4.744  84.004  98.322  1.00 20.49    O
ATOM 13587 N   TYR D 370    4.345  82.395  99.857  1.00 20.98    N
ATOM 13589 CA  TYR D 370    5.727  81.892  99.878  1.00 21.12    C
ATOM 13591 CB  TYR D 370    5.896  80.742 100.896  1.00 21.08    C
ATOM 13594 CG  TYR D 370    6.216  81.184 102.311  1.00 21.99    C
ATOM 13595 CD1 TYR D 370    5.260  81.100 103.337  1.00 23.12    C
ATOM 13597 CE1 TYR D 370    5.558  81.534 104.663  1.00 21.94    C
ATOM 13599 CZ  TYR D 370    6.810  82.049 104.957  1.00 23.03    C
ATOM 13600 OH  TYR D 370    7.112  82.479 106.263  1.00 25.50    O
ATOM 13602 CE2 TYR D 370    7.774  82.153 103.950  1.00 21.94    C
ATOM 13604 CD2 TYR D 370    7.475  81.716 102.636  1.00 23.21    C
ATOM 13606 C   TYR D 370    6.166  81.444  98.474  1.00 21.05    C
ATOM 13607 O   TYR D 370    7.297  81.665  98.047  1.00 21.37    O
ATOM 13608 N   ALA D 371    5.251  80.834  97.740  1.00 21.17    N
ATOM 13610 CA  ALA D 371    5.563  80.263  96.418  1.00 20.62    C
ATOM 13612 CB  ALA D 371    4.501  79.315  96.045  1.00 20.58    C
ATOM 13616 C   ALA D 371    5.752  81.321  95.300  1.00 20.48    C
ATOM 13617 O   ALA D 371    6.556  81.153  94.317  1.00 20.25    O
ATOM 13618 N   LEU D 372    5.015  82.418  95.477  1.00 20.23    N
ATOM 13620 CA  LEU D 372    5.093  83.563  94.584  1.00 19.99    C
ATOM 13622 CB  LEU D 372    3.827  84.413  94.692  1.00 19.96    C
ATOM 13625 CG  LEU D 372    2.626  83.838  93.941  1.00 20.08    C
ATOM 13627 CD1 LEU D 372    1.315  84.479  94.375  1.00 19.70    C
ATOM 13631 CD2 LEU D 372    2.806  83.998  92.443  1.00 20.63    C
ATOM 13635 C   LEU D 372    6.315  84.416  94.907  1.00 20.05    C
ATOM 13636 O   LEU D 372    6.963  84.920  93.985  1.00 20.44    O
ATOM 13637 N   LEU D 373    6.629  84.557  96.202  1.00 19.51    N
ATOM 13639 CA  LEU D 373    7.800  85.302  96.648  1.00 19.22    C
ATOM 13641 CB  LEU D 373    7.872  85.398  98.207  1.00 19.24    C
ATOM 13644 CG  LEU D 373    8.021  86.779  98.837  1.00 19.46    C
ATOM 13646 CD1 LEU D 373    8.081  86.667 100.355  1.00 19.71    C
ATOM 13650 CD2 LEU D 373    9.262  87.425  98.331  1.00 20.42    C
ATOM 13654 C   LEU D 373    9.037  84.596  96.091  1.00 18.74    C
ATOM 13655 O   LEU D 373    9.922  85.223  95.513  1.00 18.49    O
ATOM 13656 N   ILE D 374    9.100  83.288  96.312  1.00 18.29    N
ATOM 13658 CA  ILE D 374   10.227  82.472  95.827  1.00 18.22    C
ATOM 13660 CB  ILE D 374    9.999  80.978  96.162  1.00 18.42    C
ATOM 13662 CG1 ILE D 374   10.242  80.730  97.656  1.00 19.63    C
ATOM 13665 CD1 ILE D 374    9.598  79.469  98.203  1.00 20.49    C
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ATOM  13669  CG2 ILE D 374    10.940 80.076 95.338 1.00 18.65      C
ATOM  13673  C   ILE D 374    10.417 82.671 94.315 1.00 17.54      C
ATOM  13674  O   ILE D 374    11.536 82.863 93.848 1.00 16.73      O
ATOM  13675  N   ALA D 375     9.313 82.672 93.568 1.00 17.01      N
ATOM  13677  CA  ALA D 375     9.393 82.871 92.125 1.00 16.61      C
ATOM  13679  CB  ALA D 375     8.028 82.672 91.468 1.00 16.59      C
ATOM  13683  C   ALA D 375     9.974 84.256 91.803 1.00 16.29      C
ATOM  13684  O   ALA D 375    10.880 84.385 90.918 1.00 16.64      O
ATOM  13685  N   ILE D 376     9.498 85.281 92.544 1.00 16.20      N
ATOM  13687  CA  ILE D 376    10.032 86.638 92.379 1.00 16.40      C
ATOM  13689  CB  ILE D 376     9.248 87.627 93.324 1.00 16.11      C
ATOM  13691  CG1 ILE D 376     7.825 87.803 92.781 1.00 16.30      C
ATOM  13694  CD1 ILE D 376     6.843 88.452 93.715 1.00 16.19      C
ATOM  13698  CG2 ILE D 376     9.955 89.010 93.470 1.00 15.48      C
ATOM  13702  C   ILE D 376    11.538 86.666 92.678 1.00 17.41      C
ATOM  13703  O   ILE D 376    12.324 87.309 91.972 1.00 16.20      O
ATOM  13704  N   ASN D 377    11.923 85.948 93.738 1.00 19.09      N
ATOM  13706  CA  ASN D 377    13.297 85.930 94.250 1.00 20.66      C
ATOM  13708  CB  ASN D 377    13.382 85.211 95.609 1.00 21.50      C
ATOM  13711  CG  ASN D 377    14.758 85.331 96.231 1.00 22.32      C
ATOM  13712  OD1 ASN D 377    15.659 84.486 96.019 1.00 24.66      O
ATOM  13713  ND2 ASN D 377    14.940 86.428 96.962 1.00 26.15      N
ATOM  13716  C   ASN D 377    14.264 85.247 93.303 1.00 21.20      C
ATOM  13717  O   ASN D 377    15.445 85.658 93.169 1.00 22.09      O
ATOM  13718  N   ILE D 378    13.731 84.242 92.605 1.00 22.45      N
ATOM  13720  CA  ILE D 378    14.450 83.547 91.538 1.00 22.55      C
ATOM  13722  CB  ILE D 378    13.658 82.292 91.021 1.00 22.50      C
ATOM  13724  CG1 ILE D 378    13.750 81.164 92.056 1.00 22.30      C
ATOM  13727  CD1 ILE D 378    12.946 79.921 91.696 1.00 22.32      C
ATOM  13731  CG2 ILE D 378    14.210 81.777 89.682 1.00 22.42      C
ATOM  13735  C   ILE D 378    14.710 84.538 90.421 1.00 22.67      C
ATOM  13736  O   ILE D 378    15.822 84.598 89.899 1.00 23.46      O
ATOM  13737  N   PHE D 379    13.693 85.314 90.058 1.00 23.13      N
ATOM  13739  CA  PHE D 379    13.713 86.023 88.775 1.00 23.43      C
ATOM  13741  CB  PHE D 379    12.330 85.940 88.102 1.00 23.42      C
ATOM  13744  CG  PHE D 379    11.977 84.551 87.586 1.00 23.26      C
ATOM  13745  CD1 PHE D 379    10.824 83.888 88.017 1.00 23.13      C
ATOM  13747  CE1 PHE D 379    10.481 82.638 87.514 1.00 23.45      C
ATOM  13749  CZ  PHE D 379    11.295 82.029 86.575 1.00 23.02      C
ATOM  13751  CE2 PHE D 379    12.451 82.678 86.131 1.00 23.17      C
ATOM  13753  CD2 PHE D 379    12.785 83.935 86.634 1.00 23.34      C
ATOM  13755  C   PHE D 379    14.228 87.464 88.929 1.00 23.64      C
ATOM  13756  O   PHE D 379    13.606 88.431 88.457 1.00 24.39      O
ATOM  13757  N   SER D 380    15.422 87.579 89.528 1.00 23.56      N
ATOM  13759  CA  SER D 380    16.113 88.857 89.670 1.00 23.81      C
ATOM  13761  CB  SER D 380    16.723 88.941 91.061 1.00 24.08      C
ATOM  13764  OG  SER D 380    15.890 88.308 92.019 1.00 22.99      O
ATOM  13766  C   SER D 380    17.217 89.047 88.623 1.00 24.40      C
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ATOM 13767 O   SER D 380   18.147 88.229 88.549 1.00 24.34      O
ATOM 13768 N   ALA D 381   17.110 90.135 87.835 1.00 25.02      N
ATOM 13770 CA  ALA D 381   18.046 90.400 86.731 1.00 25.63      C
ATOM 13772 CB  ALA D 381   17.350 91.257 85.629 1.00 25.63      C
ATOM 13776 C   ALA D 381   19.374 91.056 87.178 1.00 26.26      C
ATOM 13777 O   ALA D 381   20.350 91.084 86.409 1.00 26.43      O
ATOM 13778 N   ASP D 382   19.423 91.565 88.413 1.00 27.15      N
ATOM 13780 CA  ASP D 382   20.661 92.158 88.963 1.00 27.84      C
ATOM 13782 CB  ASP D 382   20.310 93.260 89.959 1.00 27.97      C
ATOM 13785 CG  ASP D 382   20.075 92.717 91.336 1.00 29.48      C
ATOM 13786 OD1 ASP D 382   19.208 91.823 91.476 1.00 31.55      O
ATOM 13787 OD2 ASP D 382   20.729 93.085 92.335 1.00 31.34      O
ATOM 13788 C   ASP D 382   21.614 91.140 89.662 1.00 27.85      C
ATOM 13789 O   ASP D 382   22.545 91.529 90.450 1.00 28.22      O
ATOM 13790 N   ARG D 383   21.389 89.846 89.380 1.00 27.58      N
ATOM 13792 CA  ARG D 383   22.362 88.816 89.740 1.00 27.32      C
ATOM 13794 CB  ARG D 383   21.781 87.417 89.530 1.00 27.18      C
ATOM 13797 CG  ARG D 383   20.517 87.169 90.283 1.00 26.76      C
ATOM 13800 CD  ARG D 383   20.626 87.429 91.759 1.00 25.16      C
ATOM 13803 NE  ARG D 383   19.465 86.902 92.452 1.00 24.18      N
ATOM 13805 CZ  ARG D 383   19.320 86.892 93.771 1.00 23.48      C
ATOM 13806 NH1 ARG D 383   20.267 87.391 94.558 1.00 23.07      N
ATOM 13809 NH2 ARG D 383   18.216 86.385 94.301 1.00 22.02      N
ATOM 13812 C   ARG D 383   23.615 88.962 88.867 1.00 27.18      C
ATOM 13813 O   ARG D 383   23.537 89.480 87.750 1.00 27.12      O
ATOM 13814 N   PRO D 384   24.769 88.528 89.384 1.00 27.23      N
ATOM 13815 CA  PRO D 384   25.991 88.459 88.564 1.00 26.91      C
ATOM 13817 CB  PRO D 384   27.082 88.032 89.559 1.00 26.93      C
ATOM 13820 CG  PRO D 384   26.338 87.410 90.730 1.00 27.27      C
ATOM 13823 CD  PRO D 384   24.989 88.072 90.778 1.00 27.08      C
ATOM 13826 C   PRO D 384   25.819 87.395 87.484 1.00 26.70      C
ATOM 13827 O   PRO D 384   25.138 86.387 87.752 1.00 26.88      O
ATOM 13828 N   ASN D 385   26.387 87.641 86.298 1.00 25.93      N
ATOM 13830 CA  ASN D 385   26.444 86.662 85.198 1.00 25.76      C
ATOM 13832 CB  ASN D 385   27.162 85.376 85.639 1.00 25.58      C
ATOM 13835 CG  ASN D 385   28.619 85.650 86.047 1.00 25.58      C
ATOM 13836 OD1 ASN D 385   28.909 85.960 87.233 1.00 25.30      O
ATOM 13837 ND2 ASN D 385   29.548 85.537 85.061 1.00 25.65      N
ATOM 13840 C   ASN D 385   25.125 86.321 84.479 1.00 25.63      C
ATOM 13841 O   ASN D 385   25.104 85.409 83.641 1.00 25.82      O
ATOM 13842 N   VAL D 386   24.043 87.062 84.746 1.00 25.29      N
ATOM 13844 CA  VAL D 386   22.814 86.907 83.937 1.00 25.21      C
ATOM 13846 CB  VAL D 386   21.595 87.548 84.606 1.00 25.07      C
ATOM 13848 CG1 VAL D 386   20.318 87.212 83.843 1.00 24.86      C
ATOM 13852 CG2 VAL D 386   21.480 87.106 86.047 1.00 25.54      C
ATOM 13856 C   VAL D 386   22.988 87.590 82.559 1.00 25.15      C
ATOM 13857 O   VAL D 386   23.303 88.783 82.506 1.00 24.96      O
ATOM 13858 N   GLN D 387   22.750 86.850 81.467 1.00 25.13      N
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ATOM 13860 CA  GLN D 387    22.983 87.360 80.103 1.00 25.50      C
ATOM 13862 CB  GLN D 387    23.606 86.270 79.227 1.00 25.28      C
ATOM 13865 CG  GLN D 387    24.872 85.665 79.794 1.00 24.89      C
ATOM 13868 CD  GLN D 387    24.663 84.237 80.274 1.00 25.18      C
ATOM 13869 OE1 GLN D 387    24.186 83.364 79.502 1.00 25.79      O
ATOM 13870 NE2 GLN D 387    25.012 83.997 81.559 1.00 26.40      N
ATOM 13873 C   GLN D 387    21.742 87.918 79.384 1.00 25.83      C
ATOM 13874 O   GLN D 387    21.878 88.634 78.386 1.00 25.87      O
ATOM 13875 N   GLU D 388    20.544 87.585 79.875 1.00 26.23      N
ATOM 13877 CA  GLU D 388    19.297 88.098 79.290 1.00 26.42      C
ATOM 13879 CB  GLU D 388    18.482 86.968 78.644 1.00 26.39      C
ATOM 13882 CG  GLU D 388    19.135 86.340 77.418 1.00 26.40      C
ATOM 13885 CD  GLU D 388    18.706 84.896 77.202 1.00 26.62      C
ATOM 13886 OE1 GLU D 388    19.006 84.039 78.077 1.00 27.22      O
ATOM 13887 OE2 GLU D 388    18.066 84.616 76.158 1.00 25.94      O
ATOM 13888 C   GLU D 388    18.472 88.796 80.370 1.00 26.63      C
ATOM 13889 O   GLU D 388    17.370 88.341 80.704 1.00 26.74      O
ATOM 13890 N   PRO D 389    18.999 89.901 80.910 1.00 26.81      N
ATOM 13891 CA  PRO D 389    18.341 90.606 82.023 1.00 26.83      C
ATOM 13893 CB  PRO D 389    19.406 91.624 82.451 1.00 26.81      C
ATOM 13896 CG  PRO D 389    20.173 91.902 81.223 1.00 26.80      C
ATOM 13899 CD  PRO D 389    20.230 90.596 80.485 1.00 26.85      C
ATOM 13902 C   PRO D 389    17.033 91.310 81.594 1.00 26.86      C
ATOM 13903 O   PRO D 389    16.163 91.514 82.464 1.00 27.20      O
ATOM 13904 N   GLY D 390    16.904 91.668 80.294 1.00 27.13      N
ATOM 13906 CA  GLY D 390    15.659 92.210 79.741 1.00 27.02      C
ATOM 13909 C   GLY D 390    14.529 91.193 79.814 1.00 27.23      C
ATOM 13910 O   GLY D 390    13.395 91.551 80.170 1.00 27.97      O
ATOM 13911 N   ARG D 391    14.846 89.916 79.515 1.00 26.99      N
ATOM 13913 CA  ARG D 391    13.886 88.808 79.659 1.00 26.85      C
ATOM 13915 CB  ARG D 391    14.278 87.645 78.736 1.00 26.79      C
ATOM 13918 CG  ARG D 391    13.856 87.854 77.272 1.00 27.15      C
ATOM 13921 CD  ARG D 391    14.356 86.794 76.294 1.00 27.09      C
ATOM 13924 NE  ARG D 391    14.388 85.448 76.885 1.00 27.35      N
ATOM 13926 CZ  ARG D 391    14.920 84.377 76.292 1.00 26.90      C
ATOM 13927 NH1 ARG D 391    15.463 84.468 75.072 1.00 26.64      N
ATOM 13930 NH2 ARG D 391    14.902 83.204 76.920 1.00 26.29      N
ATOM 13933 C   ARG D 391    13.671 88.280 81.101 1.00 26.54      C
ATOM 13934 O   ARG D 391    12.688 87.580 81.346 1.00 26.31      O
ATOM 13935 N   VAL D 392    14.569 88.588 82.040 1.00 26.65      N
ATOM 13937 CA  VAL D 392    14.401 88.137 83.448 1.00 26.73      C
ATOM 13939 CB  VAL D 392    15.734 88.135 84.259 1.00 26.51      C
ATOM 13941 CG1 VAL D 392    15.490 88.062 85.798 1.00 27.06      C
ATOM 13945 CG2 VAL D 392    16.599 86.970 83.846 1.00 26.65      C
ATOM 13949 C   VAL D 392    13.350 89.002 84.141 1.00 26.85      C
ATOM 13950 O   VAL D 392    12.525 88.484 84.886 1.00 27.26      O
ATOM 13951 N   GLU D 393    13.375 90.311 83.861 1.00 27.22      N
ATOM 13953 CA  GLU D 393    12.383 91.267 84.364 1.00 27.21      C
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ATOM  13955  CB  GLU D 393    12.675  92.689  83.754  1.00 27.50        C
ATOM  13958  CG  GLU D 393    11.466  93.539  83.301  1.00 27.64        C
ATOM  13961  CD  GLU D 393    11.775  94.494  82.130  1.00 28.08        C
ATOM  13962  OE1 GLU D 393    11.975  94.032  80.968  1.00 28.18        O
ATOM  13963  OE2 GLU D 393    11.790  95.731  82.359  1.00 28.07        O
ATOM  13964  C   GLU D 393    10.969  90.776  83.987  1.00 27.25        C
ATOM  13965  O   GLU D 393    10.010  90.823  84.862  1.00 27.36        O
ATOM  13966  N   ALA D 394    10.859  90.303  82.706  1.00 26.84        N
ATOM  13968  CA  ALA D 394     9.551  89.967  82.113  1.00 26.90        C
ATOM  13970  CB  ALA D 394     9.694  89.785  80.556  1.00 26.65        C
ATOM  13974  C   ALA D 394     8.870  88.727  82.746  1.00 26.77        C
ATOM  13975  O   ALA D 394     7.534  88.637  82.840  1.00 27.28        O
ATOM  13976  N   LEU D 395     9.774  87.767  83.154  1.00 26.60        N
ATOM  13978  CA  LEU D 395     9.333  86.545  83.824  1.00 26.66        C
ATOM  13980  CB  LEU D 395    10.452  85.505  83.806  1.00 26.77        C
ATOM  13983  CG  LEU D 395    10.912  85.050  82.424  1.00 26.79        C
ATOM  13985  CD1 LEU D 395    12.316  84.477  82.513  1.00 27.22        C
ATOM  13989  CD2 LEU D 395     9.942  84.033  81.850  1.00 27.09        C
ATOM  13993  C   LEU D 395     8.912  86.845  85.283  1.00 26.49        C
ATOM  13994  O   LEU D 395     7.991  86.214  85.839  1.00 26.38        O
ATOM  13995  N   GLN D 396     9.580  87.829  85.881  1.00 26.22        N
ATOM  13997  CA  GLN D 396     9.301  88.271  87.252  1.00 26.30        C
ATOM  13999  CB  GLN D 396    10.475  89.114  87.767  1.00 25.98        C
ATOM  14002  CG  GLN D 396    10.339  89.635  89.210  1.00 25.82        C
ATOM  14005  CD  GLN D 396    11.449  90.611  89.590  1.00 24.18        C
ATOM  14006  OE1 GLN D 396    12.298  90.291  90.437  1.00 21.35        O
ATOM  14007  NE2 GLN D 396    11.449  91.797  88.947  1.00 21.28        N
ATOM  14010  C   GLN D 396     8.003  89.088  87.354  1.00 26.61        C
ATOM  14011  O   GLN D 396     7.320  89.018  88.380  1.00 26.42        O
ATOM  14012  N   GLN D 397     7.670  89.843  86.289  1.00 26.64        N
ATOM  14014  CA  GLN D 397     6.553  90.798  86.317  1.00 26.71        C
ATOM  14016  CB  GLN D 397     6.525  91.683  85.053  1.00 26.94        C
ATOM  14019  CG  GLN D 397     5.948  93.094  85.271  1.00 27.02        C
ATOM  14022  CD  GLN D 397     6.983  94.187  85.067  1.00 26.83        C
ATOM  14023  OE1 GLN D 397     7.135  94.694  83.958  1.00 26.15        O
ATOM  14024  NE2 GLN D 397     7.696  94.551  86.137  1.00 26.63        N
ATOM  14027  C   GLN D 397     5.185  90.133  86.519  1.00 26.73        C
ATOM  14028  O   GLN D 397     4.417  90.588  87.358  1.00 26.66        O
ATOM  14029  N   PRO D 398     4.856  89.091  85.750  1.00 26.78        N
ATOM  14030  CA  PRO D 398     3.631  88.315  86.008  1.00 26.61        C
ATOM  14032  CB  PRO D 398     3.774  87.115  85.071  1.00 26.74        C
ATOM  14035  CG  PRO D 398     4.591  87.622  83.934  1.00 26.78        C
ATOM  14038  CD  PRO D 398     5.573  88.578  84.563  1.00 26.84        C
ATOM  14041  C   PRO D 398     3.504  87.830  87.448  1.00 26.29        C
ATOM  14042  O   PRO D 398     2.415  87.949  88.004  1.00 26.09        O
ATOM  14043  N   TYR D 399     4.584  87.302  88.029  1.00 26.04        N
ATOM  14045  CA  TYR D 399     4.533  86.789  89.398  1.00 25.83        C
ATOM  14047  CB  TYR D 399     5.810  86.029  89.765  1.00 25.70        C
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ATOM  14050  CG  TYR D 399    5.965 84.786 88.928 1.00 26.07        C
ATOM  14051  CD1 TYR D 399    6.900 84.732 87.903 1.00 26.66        C
ATOM  14053  CE1 TYR D 399    7.039 83.601 87.104 1.00 26.67        C
ATOM  14055  CZ  TYR D 399    6.226 82.506 87.322 1.00 26.59        C
ATOM  14056  OH  TYR D 399    6.391 81.392 86.526 1.00 25.95        O
ATOM  14058  CE2 TYR D 399    5.274 82.532 88.338 1.00 26.51        C
ATOM  14060  CD2 TYR D 399    5.144 83.677 89.130 1.00 26.33        C
ATOM  14062  C   TYR D 399    4.286 87.911 90.365 1.00 25.44        C
ATOM  14063  O   TYR D 399    3.615 87.710 91.377 1.00 26.13        O
ATOM  14064  N   VAL D 400    4.824 89.089 90.050 1.00 25.12        N
ATOM  14066  CA  VAL D 400    4.635 90.269 90.888 1.00 25.22        C
ATOM  14068  CB  VAL D 400    5.652 91.407 90.531 1.00 25.28        C
ATOM  14070  CG1 VAL D 400    5.359 92.672 91.342 1.00 25.47        C
ATOM  14074  CG2 VAL D 400    7.101 90.957 90.799 1.00 25.33        C
ATOM  14078  C   VAL D 400    3.170 90.751 90.794 1.00 24.85        C
ATOM  14079  O   VAL D 400    2.553 91.087 91.808 1.00 24.57        O
ATOM  14080  N   GLU D 401    2.618 90.751 89.577 1.00 24.80        N
ATOM  14082  CA  GLU D 401    1.219 91.153 89.324 1.00 24.54        C
ATOM  14084  CB  GLU D 401    0.950 91.243 87.821 1.00 24.93        C
ATOM  14087  CG  GLU D 401    1.589 92.435 87.120 1.00 25.22        C
ATOM  14090  CD  GLU D 401    1.648 92.251 85.616 1.00 26.82        C
ATOM  14091  OE1 GLU D 401    0.925 91.366 85.092 1.00 28.67        O
ATOM  14092  OE2 GLU D 401    2.411 92.988 84.949 1.00 27.86        O
ATOM  14093  C   GLU D 401    0.176 90.182 89.918 1.00 24.23        C
ATOM  14094  O   GLU D 401   -1.003 90.581 90.290 1.00 25.03        O
ATOM  14095  N   ALA D 402    0.621 88.910 90.002 1.00 23.46        N
ATOM  14097  CA  ALA D 402   -0.117 87.820 90.670 1.00 22.74        C
ATOM  14099  CB  ALA D 402    0.489 86.490 90.270 1.00 22.65        C
ATOM  14103  C   ALA D 402   -0.109 87.951 92.216 1.00 22.20        C
ATOM  14104  O   ALA D 402   -1.144 87.757 92.860 1.00 21.72        O
ATOM  14105  N   LEU D 403    1.047 88.270 92.804 1.00 21.80        N
ATOM  14107  CA  LEU D 403    1.153 88.378 94.275 1.00 21.69        C
ATOM  14109  CB  LEU D 403    2.614 88.365 94.764 1.00 21.32        C
ATOM  14112  CG  LEU D 403    2.877 88.644 96.263 1.00 20.59        C
ATOM  14114  CD1 LEU D 403    2.174 87.643 97.193 1.00 19.48        C
ATOM  14118  CD2 LEU D 403    4.374 88.685 96.553 1.00 19.77        C
ATOM  14122  C   LEU D 403    0.460 89.643 94.768 1.00 21.92        C
ATOM  14123  O   LEU D 403   -0.014 89.687 95.903 1.00 21.96        O
ATOM  14124  N   LEU D 404    0.370 90.655 93.897 1.00 22.17        N
ATOM  14126  CA  LEU D 404   -0.155 91.953 94.316 1.00 22.36        C
ATOM  14128  CB  LEU D 404    0.215 93.045 93.303 1.00 21.86        C
ATOM  14131  CG  LEU D 404   -0.498 94.394 93.455 1.00 21.89        C
ATOM  14133  CD1 LEU D 404   -0.338 95.016 94.838 1.00 21.21        C
ATOM  14137  CD2 LEU D 404   -0.009 95.367 92.391 1.00 22.61        C
ATOM  14141  C   LEU D 404   -1.665 91.875 94.510 1.00 22.77        C
ATOM  14142  O   LEU D 404   -2.213 92.426 95.471 1.00 22.95        O
ATOM  14143  N   SER D 405   -2.328 91.181 93.587 1.00 23.38        N
ATOM  14145  CA  SER D 405   -3.775 91.032 93.623 1.00 23.72        C
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ATOM  14147 CB  SER D 405    -4.296 90.563 92.261 1.00 23.64      C
ATOM  14150 OG  SER D 405    -4.049 91.544 91.265 1.00 23.54      O
ATOM  14152 C   SER D 405    -4.174 90.041 94.704 1.00 24.14      C
ATOM  14153 O   SER D 405    -5.198 90.211 95.360 1.00 24.22      O
ATOM  14154 N   TYR D 406    -3.367 89.005 94.878 1.00 24.67      N
ATOM  14156 CA  TYR D 406    -3.599 88.032 95.935 1.00 25.59      C
ATOM  14158 CB  TYR D 406    -2.493 86.973 95.951 1.00 25.65      C
ATOM  14161 CG  TYR D 406    -2.802 85.800 96.852 1.00 26.18      C
ATOM  14162 CD1 TYR D 406    -3.641 84.777 96.425 1.00 27.08      C
ATOM  14164 CE1 TYR D 406    -3.934 83.698 97.246 1.00 27.03      C
ATOM  14166 CZ  TYR D 406    -3.392 83.637 98.509 1.00 26.80      C
ATOM  14167 OH  TYR D 406    -3.685 82.570 99.320 1.00 26.96      O
ATOM  14169 CE2 TYR D 406    -2.565 84.645 98.962 1.00 27.03      C
ATOM  14171 CD2 TYR D 406    -2.274 85.718 98.132 1.00 26.61      C
ATOM  14173 C   TYR D 406    -3.682 88.684 97.324 1.00 26.22      C
ATOM  14174 O   TYR D 406    -4.589 88.364 98.090 1.00 26.36      O
ATOM  14175 N   THR D 407    -2.735 89.575 97.648 1.00 26.85      N
ATOM  14177 CA  THR D 407    -2.709 90.253 98.962 1.00 27.09      C
ATOM  14179 CB  THR D 407    -1.346 90.951 99.248 1.00 26.75      C
ATOM  14181 OG1 THR D 407    -0.995 91.848 98.186 1.00 25.68      O
ATOM  14183 CG2 THR D 407    -0.209 89.952 99.274 1.00 27.05      C
ATOM  14187 C   THR D 407    -3.850 91.269 99.101 1.00 27.77      C
ATOM  14188 O   THR D 407    -4.240 91.621 100.219 1.00 27.85     O
ATOM  14189 N   ARG D 408    -4.371 91.741 97.970 1.00 28.43      N
ATOM  14191 CA  ARG D 408    -5.540 92.624 97.963 1.00 29.05      C
ATOM  14193 CB  ARG D 408    -5.687 93.316 96.611 1.00 29.01      C
ATOM  14196 CG  ARG D 408    -4.740 94.472 96.397 1.00 29.00      C
ATOM  14199 CD  ARG D 408    -4.713 94.977 94.949 1.00 29.14      C
ATOM  14202 NE  ARG D 408    -5.018 96.400 94.821 1.00 28.56      N
ATOM  14204 CZ  ARG D 408    -4.275 97.384 95.322 1.00 29.15      C
ATOM  14205 NH1 ARG D 408    -3.165 97.124 96.013 1.00 30.30      N
ATOM  14208 NH2 ARG D 408    -4.648 98.643 95.143 1.00 29.46      N
ATOM  14211 C   ARG D 408    -6.839 91.881 98.290 1.00 29.68      C
ATOM  14212 O   ARG D 408    -7.776 92.485 98.809 1.00 29.93      O
ATOM  14213 N   ILE D 409    -6.898 90.586 97.972 1.00 30.33      N
ATOM  14215 CA  ILE D 409    -8.078 89.760 98.244 1.00 30.71      C
ATOM  14217 CB  ILE D 409    -8.316 88.743 97.089 1.00 30.70      C
ATOM  14219 CG1 ILE D 409    -8.597 89.474 95.767 1.00 29.85      C
ATOM  14222 CD1 ILE D 409    -8.176 88.693 94.548 1.00 28.92      C
ATOM  14226 CG2 ILE D 409    -9.487 87.800 97.408 1.00 30.58      C
ATOM  14230 C   ILE D 409    -7.967 89.042 99.597 1.00 31.33      C
ATOM  14231 O   ILE D 409    -8.972 88.799 100.253 1.00 31.40     O
ATOM  14232 N   LYS D 410    -6.755 88.705 100.023 1.00 32.21     N
ATOM  14234 CA  LYS D 410    -6.568 88.131 101.354 1.00 32.89     C
ATOM  14236 CB  LYS D 410    -5.117 87.679 101.573 1.00 32.85     C
ATOM  14239 CG  LYS D 410    -4.868 87.026 102.929 1.00 33.02     C
ATOM  14242 CD  LYS D 410    -3.689 86.066 102.900 1.00 32.61     C
ATOM  14245 CE  LYS D 410    -3.175 85.775 104.305 1.00 33.06     C
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 14248 | NZ | LYS | D | 410 | -1.844 | 85.100 | 104.288 | 1.00 32.45 | N |
| ATOM | 14252 | C | LYS | D | 410 | -7.006 | 89.188 | 102.376 | 1.00 33.50 | C |
| ATOM | 14253 | O | LYS | D | 410 | -8.127 | 89.120 | 102.904 | 1.00 33.65 | O |
| ATOM | 14254 | N | ARG | D | 411 | -6.151 | 90.189 | 102.593 | 1.00 33.98 | N |
| ATOM | 14256 | CA | ARG | D | 411 | -6.446 | 91.301 | 103.497 | 1.00 34.36 | C |
| ATOM | 14258 | CB | ARG | D | 411 | -5.413 | 91.354 | 104.636 | 1.00 34.63 | C |
| ATOM | 14261 | CG | ARG | D | 411 | -4.864 | 89.996 | 105.025 | 1.00 35.78 | C |
| ATOM | 14264 | CD | ARG | D | 411 | -4.140 | 89.958 | 106.357 | 1.00 37.58 | C |
| ATOM | 14267 | NE | ARG | D | 411 | -4.780 | 89.044 | 107.309 | 1.00 38.57 | N |
| ATOM | 14269 | CZ | ARG | D | 411 | -4.145 | 88.358 | 108.266 | 1.00 39.14 | C |
| ATOM | 14270 | NH1 | ARG | D | 411 | -2.819 | 88.448 | 108.430 | 1.00 39.02 | N |
| ATOM | 14273 | NH2 | ARG | D | 411 | -4.851 | 87.567 | 109.071 | 1.00 38.86 | N |
| ATOM | 14276 | C | ARG | D | 411 | -6.476 | 92.631 | 102.717 | 1.00 34.11 | C |
| ATOM | 14277 | O | ARG | D | 411 | -5.430 | 93.253 | 102.501 | 1.00 34.15 | O |
| ATOM | 14278 | N | PRO | D | 412 | -7.665 | 93.073 | 102.297 | 1.00 33.80 | N |
| ATOM | 14279 | CA | PRO | D | 412 | -7.804 | 94.381 | 101.635 | 1.00 33.58 | C |
| ATOM | 14281 | CB | PRO | D | 412 | -9.184 | 94.309 | 100.961 | 1.00 33.54 | C |
| ATOM | 14284 | CG | PRO | D | 412 | -9.790 | 92.996 | 101.355 | 1.00 33.66 | C |
| ATOM | 14287 | CD | PRO | D | 412 | -8.960 | 92.385 | 102.430 | 1.00 33.77 | C |
| ATOM | 14290 | C | PRO | D | 412 | -7.760 | 95.552 | 102.619 | 1.00 33.32 | C |
| ATOM | 14291 | O | PRO | D | 412 | -7.917 | 96.697 | 102.195 | 1.00 33.47 | O |
| ATOM | 14292 | N | GLN | D | 413 | -7.555 | 95.258 | 103.904 | 1.00 33.03 | N |
| ATOM | 14294 | CA | GLN | D | 413 | -7.507 | 96.264 | 104.963 | 1.00 32.59 | C |
| ATOM | 14296 | CB | GLN | D | 413 | -8.324 | 95.793 | 106.182 | 1.00 32.65 | C |
| ATOM | 14299 | CG | GLN | D | 413 | -9.648 | 95.069 | 105.852 | 1.00 32.48 | C |
| ATOM | 14302 | CD | GLN | D | 413 | -10.850 | 96.000 | 105.790 | 1.00 32.38 | C |
| ATOM | 14303 | OE1 | GLN | D | 413 | -11.115 | 96.622 | 104.758 | 1.00 32.10 | O |
| ATOM | 14304 | NE2 | GLN | D | 413 | -11.587 | 96.084 | 106.891 | 1.00 32.01 | N |
| ATOM | 14307 | C | GLN | D | 413 | -6.053 | 96.566 | 105.376 | 1.00 32.12 | C |
| ATOM | 14308 | O | GLN | D | 413 | -5.771 | 97.638 | 105.930 | 1.00 32.43 | O |
| ATOM | 14309 | N | ASP | D | 414 | -5.143 | 95.627 | 105.111 | 1.00 30.97 | N |
| ATOM | 14311 | CA | ASP | D | 414 | -3.724 | 95.823 | 105.377 | 1.00 30.31 | C |
| ATOM | 14313 | CB | ASP | D | 414 | -3.159 | 94.621 | 106.159 | 1.00 30.45 | C |
| ATOM | 14316 | CG | ASP | D | 414 | -1.724 | 94.844 | 106.639 | 1.00 30.71 | C |
| ATOM | 14317 | OD1 | ASP | D | 414 | -1.178 | 95.959 | 106.481 | 1.00 30.59 | O |
| ATOM | 14318 | OD2 | ASP | D | 414 | -1.053 | 93.950 | 107.193 | 1.00 33.64 | O |
| ATOM | 14319 | C | ASP | D | 414 | -2.948 | 96.022 | 104.070 | 1.00 29.51 | C |
| ATOM | 14320 | O | ASP | D | 414 | -2.345 | 95.079 | 103.543 | 1.00 29.27 | O |
| ATOM | 14321 | N | GLN | D | 415 | -2.938 | 97.256 | 103.568 | 1.00 28.56 | N |
| ATOM | 14323 | CA | GLN | D | 415 | -2.243 | 97.566 | 102.312 | 1.00 27.98 | C |
| ATOM | 14325 | CB | GLN | D | 415 | -2.849 | 98.802 | 101.644 | 1.00 28.17 | C |
| ATOM | 14328 | CG | GLN | D | 415 | -2.454 | 98.939 | 100.165 | 1.00 29.01 | C |
| ATOM | 14331 | CD | GLN | D | 415 | -3.344 | 99.883 | 99.379 | 1.00 29.77 | C |
| ATOM | 14332 | OE1 | GLN | D | 415 | -3.842 | 100.880 | 99.915 | 1.00 30.21 | O |
| ATOM | 14333 | NE2 | GLN | D | 415 | -3.532 | 99.581 | 98.096 | 1.00 30.34 | N |
| ATOM | 14336 | C | GLN | D | 415 | -0.725 | 97.757 | 102.438 | 1.00 27.08 | C |
| ATOM | 14337 | O | GLN | D | 415 | -0.072 | 98.088 | 101.450 | 1.00 27.03 | O |
| ATOM | 14338 | N | LEU | D | 416 | -0.164 | 97.568 | 103.633 | 1.00 26.01 | N |

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ATOM 14340 CA  LEU D 416    1.287 97.634 103.817 1.00 25.35    C
ATOM 14342 CB  LEU D 416    1.632 98.378 105.098 1.00 25.26    C
ATOM 14345 CG  LEU D 416    1.305 99.868 105.023 1.00 25.38    C
ATOM 14347 CD1 LEU D 416    1.586 100.518 106.361 1.00 26.29   C
ATOM 14351 CD2 LEU D 416    2.090 100.548 103.906 1.00 24.59   C
ATOM 14355 C   LEU D 416    1.916 96.251 103.846 1.00 24.93    C
ATOM 14356 O   LEU D 416    3.141 96.110 103.919 1.00 24.37    O
ATOM 14357 N   ARG D 417    1.073 95.231 103.761 1.00 24.23    N
ATOM 14359 CA  ARG D 417    1.545 93.865 103.770 1.00 23.87    C
ATOM 14361 CB  ARG D 417    0.363 92.914 103.937 1.00 24.30    C
ATOM 14364 CG  ARG D 417    0.738 91.459 103.953 1.00 24.85    C
ATOM 14367 CD  ARG D 417   -0.239 90.589 103.143 1.00 26.32    C
ATOM 14370 NE  ARG D 417    0.067 89.191 103.357 1.00 25.65    N
ATOM 14372 CZ  ARG D 417   -0.120 88.563 104.500 1.00 25.52    C
ATOM 14373 NH1 ARG D 417   -0.653 89.179 105.543 1.00 24.86    N
ATOM 14376 NH2 ARG D 417    0.224 87.292 104.601 1.00 27.39    N
ATOM 14379 C   ARG D 417    2.322 93.557 102.490 1.00 22.58    C
ATOM 14380 O   ARG D 417    3.385 92.950 102.555 1.00 21.77    O
ATOM 14381 N   PHE D 418    1.807 93.987 101.341 1.00 21.50    N
ATOM 14383 CA  PHE D 418    2.508 93.725 100.085 1.00 21.07    C
ATOM 14385 CB  PHE D 418    1.691 94.131 98.860 1.00 20.69     C
ATOM 14388 CG  PHE D 418    2.377 93.826 97.560 1.00 21.65     C
ATOM 14389 CD1 PHE D 418    2.880 92.551 97.306 1.00 22.82     C
ATOM 14391 CE1 PHE D 418    3.518 92.269 96.100 1.00 22.73     C
ATOM 14393 CZ  PHE D 418    3.665 93.254 95.149 1.00 21.48     C
ATOM 14395 CE2 PHE D 418    3.186 94.526 95.397 1.00 20.67     C
ATOM 14397 CD2 PHE D 418    2.551 94.810 96.596 1.00 21.06     C
ATOM 14399 C   PHE D 418    3.922 94.336 100.030 1.00 20.35    C
ATOM 14400 O   PHE D 418    4.873 93.627 99.712 1.00 20.85     O
ATOM 14401 N   PRO D 419    4.081 95.623 100.325 1.00 19.44    N
ATOM 14402 CA  PRO D 419    5.415 96.222 100.322 1.00 19.00    C
ATOM 14404 CB  PRO D 419    5.151 97.688 100.695 1.00 19.07    C
ATOM 14407 CG  PRO D 419    3.708 97.920 100.399 1.00 19.03    C
ATOM 14410 CD  PRO D 419    3.045 96.620 100.659 1.00 19.88    C
ATOM 14413 C   PRO D 419    6.323 95.564 101.338 1.00 18.70    C
ATOM 14414 O   PRO D 419    7.491 95.422 101.075 1.00 18.25    O
ATOM 14415 N   ARG D 420    5.781 95.159 102.475 1.00 18.74    N
ATOM 14417 CA  ARG D 420    6.570 94.525 103.509 1.00 19.10    C
ATOM 14419 CB  ARG D 420    5.727 94.308 104.772 1.00 19.42    C
ATOM 14422 CG  ARG D 420    5.610 95.531 105.690 1.00 21.39    C
ATOM 14425 CD  ARG D 420    5.506 95.171 107.174 1.00 24.71    C
ATOM 14428 NE  ARG D 420    5.136 96.302 108.027 1.00 25.99    N
ATOM 14430 CZ  ARG D 420    3.894 96.654 108.327 1.00 27.35    C
ATOM 14431 NH1 ARG D 420    2.846 95.988 107.837 1.00 28.76    N
ATOM 14434 NH2 ARG D 420    3.692 97.691 109.124 1.00 28.38    N
ATOM 14437 C   ARG D 420    7.154 93.192 103.012 1.00 18.86    C
ATOM 14438 O   ARG D 420    8.284 92.845 103.339 1.00 18.33    O
ATOM 14439 N   MET D 421    6.382 92.461 102.216 1.00 18.99    N
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ATOM 14441 CA  MET D 421      6.832 91.199 101.635 1.00 19.13          C
ATOM 14443 CB  MET D 421      5.700 90.531 100.862 1.00 19.64          C
ATOM 14446 CG  MET D 421      4.783 89.695 101.721 1.00 20.31          C
ATOM 14449 SD  MET D 421      3.336 89.252 100.764 1.00 21.27          S
ATOM 14450 CE  MET D 421      3.750 87.736 100.250 1.00 21.18          C
ATOM 14454 C   MET D 421      7.973 91.422 100.674 1.00 18.77          C
ATOM 14455 O   MET D 421      8.883 90.618 100.605 1.00 18.22          O
ATOM 14456 N   LEU D 422      7.900 92.503 99.914 1.00 18.49           N
ATOM 14458 CA  LEU D 422      8.961 92.834 98.985 1.00 19.09           C
ATOM 14460 CB  LEU D 422      8.500 93.861 97.943 1.00 19.10           C
ATOM 14463 CG  LEU D 422      7.224 93.541 97.168 1.00 19.36           C
ATOM 14465 CD1 LEU D 422      6.874 94.710 96.311 1.00 20.66           C
ATOM 14469 CD2 LEU D 422      7.385 92.288 96.330 1.00 19.92           C
ATOM 14473 C   LEU D 422     10.165 93.360 99.745 1.00 19.29           C
ATOM 14474 O   LEU D 422     11.298 93.160 99.322 1.00 19.59           O
ATOM 14475 N   MET D 423      9.930 94.020 100.874 1.00 19.59          N
ATOM 14477 CA  MET D 423     11.037 94.491 101.714 1.00 20.09          C
ATOM 14479 CB  MET D 423     10.549 95.321 102.908 1.00 20.43          C
ATOM 14482 CG  MET D 423      9.777 96.590 102.599 1.00 23.17          C
ATOM 14485 SD  MET D 423     10.620 97.852 101.626 1.00 29.21          S
ATOM 14486 CE  MET D 423     12.328 97.743 102.213 1.00 28.12          C
ATOM 14490 C   MET D 423     11.861 93.310 102.246 1.00 19.20          C
ATOM 14491 O   MET D 423     13.019 93.459 102.573 1.00 18.48          O
ATOM 14492 N   LYS D 424     11.260 92.137 102.313 1.00 19.52          N
ATOM 14494 CA  LYS D 424     11.970 90.937 102.758 1.00 19.82          C
ATOM 14496 CB  LYS D 424     10.984 89.863 103.164 1.00 20.40          C
ATOM 14499 CG  LYS D 424     10.073 90.273 104.345 1.00 21.46          C
ATOM 14502 CD  LYS D 424     10.796 90.295 105.693 1.00 24.24          C
ATOM 14505 CE  LYS D 424     10.134 91.289 106.695 1.00 26.61          C
ATOM 14508 NZ  LYS D 424      9.692 92.624 106.067 1.00 28.24          N
ATOM 14512 C   LYS D 424     12.949 90.380 101.743 1.00 19.85          C
ATOM 14513 O   LYS D 424     13.913 89.731 102.136 1.00 20.18          O
ATOM 14514 N   LEU D 425     12.718 90.642 100.451 1.00 19.63          N
ATOM 14516 CA  LEU D 425     13.709 90.377 99.398 1.00 19.13           C
ATOM 14518 CB  LEU D 425     13.155 90.746 98.007 1.00 18.97           C
ATOM 14521 CG  LEU D 425     11.926 90.004 97.484 1.00 18.90           C
ATOM 14523 CD1 LEU D 425     11.445 90.629 96.155 1.00 17.97           C
ATOM 14527 CD2 LEU D 425     12.229 88.521 97.335 1.00 18.45           C
ATOM 14531 C   LEU D 425     14.997 91.170 99.605 1.00 18.76           C
ATOM 14532 O   LEU D 425     16.080 90.714 99.259 1.00 18.22           O
ATOM 14533 N   VAL D 426     14.852 92.383 100.117 1.00 18.84          N
ATOM 14535 CA  VAL D 426     15.991 93.231 100.456 1.00 19.33          C
ATOM 14537 CB  VAL D 426     15.564 94.666 100.888 1.00 19.58          C
ATOM 14539 CG1 VAL D 426     16.794 95.574 100.987 1.00 19.60          C
ATOM 14543 CG2 VAL D 426     14.524 95.278 99.903 1.00 19.48           C
ATOM 14547 C   VAL D 426     16.766 92.612 101.609 1.00 19.51          C
ATOM 14548 O   VAL D 426     17.999 92.603 101.612 1.00 19.27          O
ATOM 14549 N   SER D 427     16.022 92.094 102.584 1.00 19.50          N
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ATOM 14551 CA  SER D 427    16.618 91.452 103.728  1.00 19.64      C
ATOM 14553 CB  SER D 427    15.560 91.076 104.771  1.00 19.70      C
ATOM 14556 OG  SER D 427    14.918 92.226 105.261  1.00 18.68      O
ATOM 14558 C   SER D 427    17.359 90.217 103.268  1.00 19.62      C
ATOM 14559 O   SER D 427    18.460 89.960 103.731  1.00 19.71      O
ATOM 14560 N   LEU D 428    16.768 89.461 102.350  1.00 19.60      N
ATOM 14562 CA  LEU D 428    17.430 88.260 101.823  1.00 19.70      C
ATOM 14564 CB  LEU D 428    16.542 87.539 100.827  1.00 19.32      C
ATOM 14567 CG  LEU D 428    15.371 86.853 101.519  1.00 18.01      C
ATOM 14569 CD1 LEU D 428    14.341 86.450 100.519  1.00 19.67      C
ATOM 14573 CD2 LEU D 428    15.845 85.662 102.306  1.00 17.49      C
ATOM 14577 C   LEU D 428    18.798 88.546 101.204  1.00 20.08      C
ATOM 14578 O   LEU D 428    19.719 87.768 101.389  1.00 20.31      O
ATOM 14579 N   ARG D 429    18.952 89.682 100.535  1.00 20.87      N
ATOM 14581 CA  ARG D 429    20.265 90.082 100.031  1.00 21.39      C
ATOM 14583 CB  ARG D 429    20.182 91.347 99.198   1.00 21.37      C
ATOM 14586 CG  ARG D 429    19.280 91.251 98.003   1.00 20.84      C
ATOM 14589 CD  ARG D 429    19.770 90.313 96.958   1.00 20.94      C
ATOM 14592 NE  ARG D 429    18.678 89.931 96.073   1.00 21.17      N
ATOM 14594 CZ  ARG D 429    18.610 90.228 94.782   1.00 18.65      C
ATOM 14595 NH1 ARG D 429    19.569 90.911 94.179   1.00 18.15      N
ATOM 14598 NH2 ARG D 429    17.557 89.829 94.090   1.00 18.92      N
ATOM 14601 C   ARG D 429    21.275 90.298 101.143  1.00 22.40      C
ATOM 14602 O   ARG D 429    22.387 89.846 101.024  1.00 23.69      O
ATOM 14603 N   THR D 430    20.904 90.979 102.221  1.00 23.30      N
ATOM 14605 CA  THR D 430    21.838 91.236 103.329  1.00 23.82      C
ATOM 14607 CB  THR D 430    21.180 92.171 104.395  1.00 23.63      C
ATOM 14609 OG1 THR D 430    21.223 93.537 103.948  1.00 24.57      O
ATOM 14611 CG2 THR D 430    21.980 92.197 105.710  1.00 23.10      C
ATOM 14615 C   THR D 430    22.283 89.928 103.984  1.00 24.24      C
ATOM 14616 O   THR D 430    23.434 89.762 104.364  1.00 24.96      O
ATOM 14617 N   LEU D 431    21.341 89.014 104.117  1.00 24.61      N
ATOM 14619 CA  LEU D 431    21.561 87.716 104.729  1.00 24.97      C
ATOM 14621 CB  LEU D 431    20.213 87.008 104.856  1.00 24.72      C
ATOM 14624 CG  LEU D 431    19.473 86.920 106.203  1.00 25.30      C
ATOM 14626 CD1 LEU D 431    20.058 87.755 107.324  1.00 25.42      C
ATOM 14630 CD2 LEU D 431    17.988 87.212 106.047  1.00 24.32      C
ATOM 14634 C   LEU D 431    22.546 86.846 103.919  1.00 25.70      C
ATOM 14635 O   LEU D 431    23.233 86.014 104.481  1.00 25.14      O
ATOM 14636 N   SER D 432    22.603 87.060 102.602  1.00 26.94      N
ATOM 14638 CA  SER D 432    23.599 86.436 101.735  1.00 27.75      C
ATOM 14640 CB  SER D 432    23.347 86.779 100.264  1.00 27.96      C
ATOM 14643 OG  SER D 432    22.562 85.771 99.649   1.00 29.47      O
ATOM 14645 C   SER D 432    25.020 86.838 102.101  1.00 28.16      C
ATOM 14646 O   SER D 432    25.918 85.998 102.101  1.00 28.43      O
ATOM 14647 N   SER D 433    25.241 88.112 102.403  1.00 28.31      N
ATOM 14649 CA  SER D 433    26.575 88.527 102.835  1.00 28.49      C
ATOM 14651 CB  SER D 433    26.699 90.042 102.796  1.00 28.45      C
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ATOM 14654 OG  SER D 433    26.638 90.478 101.451 1.00 28.91      O
ATOM 14656 C   SER D 433    26.950 87.959 104.216 1.00 28.47      C
ATOM 14657 O   SER D 433    28.082 87.536 104.426 1.00 28.09      O
ATOM 14658 N   VAL D 434    25.998 87.926 105.145 1.00 28.89      N
ATOM 14660 CA  VAL D 434    26.218 87.262 106.442 1.00 29.21      C
ATOM 14662 CB  VAL D 434    25.005 87.435 107.382 1.00 29.01      C
ATOM 14664 CG1 VAL D 434    25.059 86.481 108.564 1.00 29.49      C
ATOM 14668 CG2 VAL D 434    24.929 88.865 107.878 1.00 29.74      C
ATOM 14672 C   VAL D 434    26.569 85.767 106.236 1.00 29.32      C
ATOM 14673 O   VAL D 434    27.430 85.215 106.942 1.00 29.25      O
ATOM 14674 N   HIS D 435    25.934 85.127 105.257 1.00 29.25      N
ATOM 14676 CA  HIS D 435    26.223 83.725 104.984 1.00 29.62      C
ATOM 14678 CB  HIS D 435    25.227 83.128 103.997 1.00 29.47      C
ATOM 14681 CG  HIS D 435    25.667 81.818 103.432 1.00 30.09      C
ATOM 14682 ND1 HIS D 435    26.210 81.699 102.171 1.00 31.27      N
ATOM 14684 CE1 HIS D 435    26.515 80.434 101.946 1.00 32.03      C
ATOM 14686 NE2 HIS D 435    26.202 79.732 103.020 1.00 31.67      N
ATOM 14688 CD2 HIS D 435    25.669 80.574 103.963 1.00 30.51      C
ATOM 14690 C   HIS D 435    27.654 83.563 104.460 1.00 29.81      C
ATOM 14691 O   HIS D 435    28.359 82.645 104.865 1.00 29.40      O
ATOM 14692 N   SER D 436    28.080 84.478 103.593 1.00 30.21      N
ATOM 14694 CA  SER D 436    29.422 84.433 103.014 1.00 30.90      C
ATOM 14696 CB  SER D 436    29.543 85.433 101.874 1.00 30.73      C
ATOM 14699 OG  SER D 436    28.677 85.053 100.821 1.00 31.21      O
ATOM 14701 C   SER D 436    30.525 84.678 104.039 1.00 31.31      C
ATOM 14702 O   SER D 436    31.659 84.236 103.846 1.00 31.66      O
ATOM 14703 N   GLU D 437    30.190 85.384 105.116 1.00 31.66      N
ATOM 14705 CA  GLU D 437    31.111 85.590 106.232 1.00 31.86      C
ATOM 14707 CB  GLU D 437    30.667 86.779 107.096 1.00 32.13      C
ATOM 14710 CG  GLU D 437    30.690 88.122 106.378 1.00 33.24      C
ATOM 14713 CD  GLU D 437    30.107 89.251 107.222 1.00 34.45      C
ATOM 14714 OE1 GLU D 437    30.744 90.327 107.285 1.00 35.95      O
ATOM 14715 OE2 GLU D 437    29.024 89.066 107.825 1.00 34.25      O
ATOM 14716 C   GLU D 437    31.203 84.333 107.101 1.00 31.52      C
ATOM 14717 O   GLU D 437    32.249 84.077 107.703 1.00 31.30      O
ATOM 14718 N   GLN D 438    30.109 83.569 107.183 1.00 31.14      N
ATOM 14720 CA  GLN D 438    30.120 82.299 107.909 1.00 30.94      C
ATOM 14722 CB  GLN D 438    28.695 81.757 108.135 1.00 31.03      C
ATOM 14725 CG  GLN D 438    28.607 80.274 108.614 1.00 31.22      C
ATOM 14728 CD  GLN D 438    29.016 80.078 110.089 1.00 31.76      C
ATOM 14729 OE1 GLN D 438    28.244 80.392 111.002 1.00 31.04      O
ATOM 14730 NE2 GLN D 438    30.225 79.560 110.312 1.00 29.92      N
ATOM 14733 C   GLN D 438    30.991 81.273 107.173 1.00 30.81      C
ATOM 14734 O   GLN D 438    31.746 80.546 107.819 1.00 30.62      O
ATOM 14735 N   VAL D 439    30.906 81.219 105.841 1.00 30.52      N
ATOM 14737 CA  VAL D 439    31.718 80.257 105.086 1.00 30.75      C
ATOM 14739 CB  VAL D 439    31.245 80.054 103.598 1.00 30.81      C
ATOM 14741 CG1 VAL D 439    29.738 79.847 103.528 1.00 30.29      C

| ATOM | 14745 | CG2 | VAL | D 439 | 31.684 | 81.193 | 102.687 | 1.00 | 31.23 | C |
| ATOM | 14749 | C | VAL | D 439 | 33.222 | 80.606 | 105.182 | 1.00 | 30.44 | C |
| ATOM | 14750 | O | VAL | D 439 | 34.065 | 79.711 | 105.219 | 1.00 | 29.96 | O |
| ATOM | 14751 | N | PHE | D 440 | 33.534 | 81.899 | 105.276 | 1.00 | 30.38 | N |
| ATOM | 14753 | CA | PHE | D 440 | 34.904 | 82.361 | 105.518 | 1.00 | 30.41 | C |
| ATOM | 14755 | CB | PHE | D 440 | 35.013 | 83.866 | 105.270 | 1.00 | 30.44 | C |
| ATOM | 14758 | CG | PHE | D 440 | 36.393 | 84.311 | 104.877 | 1.00 | 30.67 | C |
| ATOM | 14759 | CD1 | PHE | D 440 | 36.805 | 84.243 | 103.550 | 1.00 | 30.83 | C |
| ATOM | 14761 | CE1 | PHE | D 440 | 38.082 | 84.648 | 103.176 | 1.00 | 31.37 | C |
| ATOM | 14763 | CZ | PHE | D 440 | 38.962 | 85.117 | 104.138 | 1.00 | 31.42 | C |
| ATOM | 14765 | CE2 | PHE | D 440 | 38.559 | 85.183 | 105.471 | 1.00 | 31.19 | C |
| ATOM | 14767 | CD2 | PHE | D 440 | 37.282 | 84.782 | 105.831 | 1.00 | 30.44 | C |
| ATOM | 14769 | C | PHE | D 440 | 35.401 | 82.033 | 106.936 | 1.00 | 30.45 | C |
| ATOM | 14770 | O | PHE | D 440 | 36.591 | 81.805 | 107.147 | 1.00 | 29.95 | O |
| ATOM | 14771 | N | ALA | D 441 | 34.478 | 82.015 | 107.898 | 1.00 | 30.73 | N |
| ATOM | 14773 | CA | ALA | D 441 | 34.781 | 81.635 | 109.285 | 1.00 | 30.85 | C |
| ATOM | 14775 | CB | ALA | D 441 | 33.634 | 82.049 | 110.209 | 1.00 | 30.85 | C |
| ATOM | 14779 | C | ALA | D 441 | 35.053 | 80.133 | 109.441 | 1.00 | 30.94 | C |
| ATOM | 14780 | O | ALA | D 441 | 35.767 | 79.727 | 110.356 | 1.00 | 30.83 | O |
| ATOM | 14781 | N | LEU | D 442 | 34.467 | 79.315 | 108.565 | 1.00 | 31.13 | N |
| ATOM | 14783 | CA | LEU | D 442 | 34.731 | 77.873 | 108.555 | 1.00 | 31.31 | C |
| ATOM | 14785 | CB | LEU | D 442 | 33.725 | 77.135 | 107.664 | 1.00 | 31.20 | C |
| ATOM | 14788 | CG | LEU | D 442 | 32.238 | 77.265 | 108.022 | 1.00 | 30.88 | C |
| ATOM | 14790 | CD1 | LEU | D 442 | 31.386 | 76.727 | 106.887 | 1.00 | 30.89 | C |
| ATOM | 14794 | CD2 | LEU | D 442 | 31.890 | 76.563 | 109.330 | 1.00 | 30.24 | C |
| ATOM | 14798 | C | LEU | D 442 | 36.158 | 77.592 | 108.071 | 1.00 | 31.51 | C |
| ATOM | 14799 | O | LEU | D 442 | 36.813 | 76.673 | 108.564 | 1.00 | 31.53 | O |
| ATOM | 14800 | N | ARG | D 443 | 36.628 | 78.398 | 107.116 | 1.00 | 31.71 | N |
| ATOM | 14802 | CA | ARG | D 443 | 37.975 | 78.262 | 106.561 | 1.00 | 31.95 | C |
| ATOM | 14804 | CB | ARG | D 443 | 38.206 | 79.267 | 105.420 | 1.00 | 31.99 | C |
| ATOM | 14807 | CG | ARG | D 443 | 37.193 | 79.183 | 104.280 | 1.00 | 31.97 | C |
| ATOM | 14810 | CD | ARG | D 443 | 37.816 | 79.070 | 102.902 | 1.00 | 32.22 | C |
| ATOM | 14813 | NE | ARG | D 443 | 38.495 | 77.785 | 102.709 | 1.00 | 32.12 | N |
| ATOM | 14815 | CZ | ARG | D 443 | 38.678 | 77.178 | 101.533 | 1.00 | 31.98 | C |
| ATOM | 14816 | NH1 | ARG | D 443 | 38.243 | 77.723 | 100.398 | 1.00 | 31.78 | N |
| ATOM | 14819 | NH2 | ARG | D 443 | 39.307 | 76.008 | 101.492 | 1.00 | 32.13 | N |
| ATOM | 14822 | C | ARG | D 443 | 39.056 | 78.451 | 107.628 | 1.00 | 32.19 | C |
| ATOM | 14823 | O | ARG | D 443 | 39.853 | 77.538 | 107.877 | 1.00 | 32.10 | O |
| ATOM | 14824 | N | LEU | D 444 | 39.072 | 79.635 | 108.246 | 1.00 | 32.28 | N |
| ATOM | 14826 | CA | LEU | D 444 | 40.090 | 80.001 | 109.235 | 1.00 | 32.40 | C |
| ATOM | 14828 | CB | LEU | D 444 | 41.001 | 81.122 | 108.692 | 1.00 | 32.38 | C |
| ATOM | 14831 | CG | LEU | D 444 | 42.329 | 80.722 | 108.016 | 1.00 | 32.37 | C |
| ATOM | 14833 | CD1 | LEU | D 444 | 42.378 | 81.192 | 106.562 | 1.00 | 32.45 | C |
| ATOM | 14837 | CD2 | LEU | D 444 | 43.551 | 81.254 | 108.782 | 1.00 | 31.94 | C |
| ATOM | 14841 | C | LEU | D 444 | 39.412 | 80.446 | 110.529 | 1.00 | 32.42 | C |
| ATOM | 14842 | O | LEU | D 444 | 38.555 | 79.740 | 111.067 | 1.00 | 32.44 | O |
| ATOM | 14843 | N | LYS | D 448 | 34.947 | 72.050 | 107.030 | 1.00 | 34.64 | N |
| ATOM | 14845 | CA | LYS | D 448 | 34.907 | 71.929 | 105.578 | 1.00 | 34.99 | C |

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ATOM 14847 CB  LYS D 448    36.021 70.996 105.093 1.00 35.07        C
ATOM 14850 CG  LYS D 448    36.561 71.335 103.697 1.00 35.46        C
ATOM 14853 CD  LYS D 448    38.021 70.913 103.507 1.00 35.52        C
ATOM 14856 CE  LYS D 448    38.782 71.888 102.613 1.00 35.75        C
ATOM 14859 NZ  LYS D 448    38.790 73.273 103.170 1.00 35.45        N
ATOM 14863 C   LYS D 448    33.545 71.424 105.087 1.00 35.13        C
ATOM 14864 O   LYS D 448    32.897 70.608 105.753 1.00 34.83        O
ATOM 14865 N   LEU D 449    33.141 71.901 103.905 1.00 35.26        N
ATOM 14867 CA  LEU D 449    31.821 71.627 103.330 1.00 35.21        C
ATOM 14869 CB  LEU D 449    31.285 72.871 102.618 1.00 35.38        C
ATOM 14872 CG  LEU D 449    30.930 74.105 103.453 1.00 35.63        C
ATOM 14874 CD1 LEU D 449    32.179 74.874 103.879 1.00 35.69        C
ATOM 14878 CD2 LEU D 449    30.001 75.006 102.658 1.00 35.86        C
ATOM 14882 C   LEU D 449    31.847 70.479 102.314 1.00 34.98        C
ATOM 14883 O   LEU D 449    32.843 70.282 101.624 1.00 35.07        O
ATOM 14884 N   PRO D 450    30.743 69.741 102.210 1.00 34.76        N
ATOM 14885 CA  PRO D 450    30.616 68.660 101.228 1.00 34.77        C
ATOM 14887 CB  PRO D 450    29.351 67.927 101.682 1.00 34.69        C
ATOM 14890 CG  PRO D 450    28.564 68.941 102.379 1.00 34.66        C
ATOM 14893 CD  PRO D 450    29.526 69.877 103.025 1.00 34.64        C
ATOM 14896 C   PRO D 450    30.461 69.206 99.805 1.00 34.79        C
ATOM 14897 O   PRO D 450    30.167 70.400 99.685 1.00 34.49        O
ATOM 14898 N   PRO D 451    30.619 68.360 98.773 1.00 34.72        N
ATOM 14899 CA  PRO D 451    30.835 68.818 97.384 1.00 34.70        C
ATOM 14901 CB  PRO D 451    31.029 67.504 96.597 1.00 34.62        C
ATOM 14904 CG  PRO D 451    31.349 66.471 97.617 1.00 34.64        C
ATOM 14907 CD  PRO D 451    30.599 66.886 98.858 1.00 34.77        C
ATOM 14910 C   PRO D 451    29.720 69.669 96.734 1.00 34.74        C
ATOM 14911 O   PRO D 451    30.038 70.702 96.133 1.00 34.68        O
ATOM 14912 N   LEU D 452    28.460 69.242 96.835 1.00 34.79        N
ATOM 14914 CA  LEU D 452    27.345 69.976 96.214 1.00 34.88        C
ATOM 14916 CB  LEU D 452    26.040 69.161 96.309 1.00 34.89        C
ATOM 14919 CG  LEU D 452    24.684 69.814 95.969 1.00 35.02        C
ATOM 14921 CD1 LEU D 452    24.629 70.474 94.591 1.00 34.55        C
ATOM 14925 CD2 LEU D 452    23.592 68.757 96.069 1.00 35.62        C
ATOM 14929 C   LEU D 452    27.148 71.405 96.770 1.00 34.94        C
ATOM 14930 O   LEU D 452    26.815 72.318 96.016 1.00 34.78        O
ATOM 14931 N   LEU D 453    27.347 71.592 98.077 1.00 35.18        N
ATOM 14933 CA  LEU D 453    27.282 72.926 98.700 1.00 35.02        C
ATOM 14935 CB  LEU D 453    27.171 72.820 100.224 1.00 34.90        C
ATOM 14938 CG  LEU D 453    26.136 71.864 100.796 1.00 34.34        C
ATOM 14940 CD1 LEU D 453    26.089 71.983 102.308 1.00 33.70        C
ATOM 14944 CD2 LEU D 453    24.790 72.163 100.175 1.00 34.72        C
ATOM 14948 C   LEU D 453    28.537 73.723 98.376 1.00 35.40        C
ATOM 14949 O   LEU D 453    28.492 74.945 98.240 1.00 35.08        O
ATOM 14950 N   SER D 454    29.655 73.008 98.254 1.00 35.96        N
ATOM 14952 CA  SER D 454    30.975 73.616 98.087 1.00 36.46        C
ATOM 14954 CB  SER D 454    32.071 72.577 98.372 1.00 36.43        C
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ATOM 14957 OG SER D 454    33.361 73.123 98.171 1.00 36.10    O
ATOM 14959 C  SER D 454    31.237 74.267 96.718 1.00 36.90    C
ATOM 14960 O  SER D 454    32.242 74.956 96.571 1.00 37.02    O
ATOM 14961 N  GLU D 455    30.381 74.042 95.718 1.00 37.37    N
ATOM 14963 CA GLU D 455    30.544 74.722 94.422 1.00 37.88    C
ATOM 14965 CB GLU D 455    30.527 73.727 93.254 1.00 37.89    C
ATOM 14968 CG GLU D 455    31.835 73.692 92.452 1.00 37.95    C
ATOM 14971 CD GLU D 455    31.982 74.834 91.444 1.00 37.79    C
ATOM 14972 OE1 GLU D 455   33.081 74.967 90.855 1.00 36.77    O
ATOM 14973 OE2 GLU D 455   31.013 75.598 91.230 1.00 37.92    O
ATOM 14974 C  GLU D 455    29.503 75.820 94.213 1.00 38.30    C
ATOM 14975 O  GLU D 455    29.726 76.754 93.437 1.00 38.43    O
ATOM 14976 N  ILE D 456    28.377 75.706 94.908 1.00 38.61    N
ATOM 14978 CA ILE D 456    27.346 76.730 94.861 1.00 39.00    C
ATOM 14980 CB ILE D 456    25.980 76.133 95.311 1.00 39.07    C
ATOM 14982 CG1 ILE D 456   25.531 75.080 94.287 1.00 39.36    C
ATOM 14985 CD1 ILE D 456   24.069 74.671 94.366 1.00 39.58    C
ATOM 14989 CG2 ILE D 456   24.910 77.214 95.447 1.00 39.38    C
ATOM 14993 C  ILE D 456    27.761 77.939 95.700 1.00 39.21    C
ATOM 14994 O  ILE D 456    27.422 79.077 95.358 1.00 39.19    O
ATOM 14995 N  TRP D 457    28.520 77.698 96.769 1.00 39.54    N
ATOM 14997 CA TRP D 457    28.857 78.749 97.741 1.00 39.76    C
ATOM 14999 CB TRP D 457    28.281 78.414 99.113 1.00 39.62    C
ATOM 15002 CG TRP D 457    26.820 78.269 99.108 1.00 38.92    C
ATOM 15003 CD1 TRP D 457   25.927 78.926 98.312 1.00 38.56    C
ATOM 15005 NE1 TRP D 457   24.648 78.519 98.601 1.00 39.10    N
ATOM 15007 CE2 TRP D 457   24.701 77.589 99.605 1.00 38.98    C
ATOM 15008 CD2 TRP D 457   26.059 77.407 99.941 1.00 38.91    C
ATOM 15009 CE3 TRP D 457   26.383 76.501 100.953 1.00 39.11   C
ATOM 15011 CZ3 TRP D 457   25.366 75.818 101.582 1.00 39.86   C
ATOM 15013 CH2 TRP D 457   24.029 76.010 101.215 1.00 39.88   C
ATOM 15015 CZ2 TRP D 457   23.677 76.895 100.232 1.00 39.05   C
ATOM 15017 C  TRP D 457    30.342 79.021 97.909 1.00 40.23    C
ATOM 15018 O  TRP D 457    30.725 80.152 98.223 1.00 40.26    O
ATOM 15019 N  ASP D 458    31.178 78.001 97.719 1.00 40.77    N
ATOM 15021 CA ASP D 458    32.626 78.189 97.802 1.00 41.23    C
ATOM 15023 CB ASP D 458    33.326 76.921 98.334 1.00 41.27    C
ATOM 15026 CG ASP D 458    34.181 77.191 99.564 1.00 41.37    C
ATOM 15027 OD1 ASP D 458   35.428 77.195 99.444 1.00 41.88    O
ATOM 15028 OD2 ASP D 458   33.692 77.399 100.692 1.00 40.74   O
ATOM 15029 C  ASP D 458    33.182 78.632 96.438 1.00 41.54    C
ATOM 15030 O  ASP D 458    34.243 78.182 96.015 1.00 41.72    O
ATOM 15031 N  VAL D 459    32.450 79.516 95.756 1.00 41.97    N
ATOM 15033 CA VAL D 459    32.975 80.218 94.588 1.00 42.46    C
ATOM 15035 CB VAL D 459    31.942 81.206 93.928 1.00 42.53    C
ATOM 15037 CG1 VAL D 459   32.298 81.438 92.446 1.00 42.39    C
ATOM 15041 CG2 VAL D 459   30.478 80.728 94.080 1.00 42.29    C
ATOM 15045 C  VAL D 459    34.197 81.015 95.067 1.00 42.82    C

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ATOM 15046 O   VAL D 459    35.252 81.026 94.402 1.00 42.59        O
ATOM 15047 N   ALA D 460    34.026 81.664 96.228 1.00 43.00        N
ATOM 15049 CA  ALA D 460    35.110 82.301 96.978 1.00 43.14        C
ATOM 15051 CB  ALA D 460    35.816 81.264 97.854 1.00 43.11        C
ATOM 15055 C   ALA D 460    36.121 83.020 96.079 1.00 43.30        C
ATOM 15056 O   ALA D 460    35.747 83.832 95.227 1.00 43.57        O
ATOM 15057 O37 GW3 D 500    13.548 70.869 105.884 1.00 16.41       O
ATOM 15058 C35 GW3 D 500    13.232 70.601 104.723 1.00 16.39       C
ATOM 15059 O36 GW3 D 500    12.236 69.888 104.451 1.00 15.82       O
ATOM 15060 C34 GW3 D 500    14.080 71.074 103.567 1.00 17.86       C
ATOM 15063 C32 GW3 D 500    15.021 72.154 104.070 1.00 16.05       C
ATOM 15064 C33 GW3 D 500    16.253 71.826 104.636 1.00 18.02       C
ATOM 15066 C31 GW3 D 500    14.616 73.476 104.054 1.00 15.89       C
ATOM 15068 C30 GW3 D 500    15.423 74.480 104.587 1.00 17.32       C
ATOM 15070 C29 GW3 D 500    16.648 74.153 105.166 1.00 17.58       C
ATOM 15072 C28 GW3 D 500    17.060 72.823 105.192 1.00 18.10       C
ATOM 15073 O27 GW3 D 500    18.283 72.474 105.720 1.00 19.56       O
ATOM 15074 C26 GW3 D 500    18.704 72.905 107.021 1.00 20.06       C
ATOM 15077 C25 GW3 D 500    19.806 73.952 106.982 1.00 18.98       C
ATOM 15080 C17 GW3 D 500    20.478 73.970 108.355 1.00 18.31       C
ATOM 15083 N09 GW3 D 500    21.606 74.885 108.246 1.00 19.97       N
ATOM 15084 C16 GW3 D 500    22.784 74.316 107.594 1.00 24.93       C
ATOM 15087 C18 GW3 D 500    23.430 75.263 106.611 1.00 30.42       C
ATOM 15088 C19 GW3 D 500    24.890 75.368 106.619 1.00 35.20       C
ATOM 15089 CL4 GW3 D 500    25.828 74.361 107.749 1.00 47.85       CL
ATOM 15090 C23 GW3 D 500    22.720 76.043 105.720 1.00 30.51       C
ATOM 15092 C22 GW3 D 500    23.392 76.905 104.852 1.00 31.39       C
ATOM 15094 C21 GW3 D 500    24.778 77.026 104.837 1.00 33.11       C
ATOM 15096 C20 GW3 D 500    25.567 76.275 105.690 1.00 36.39       C
ATOM 15097 C39 GW3 D 500    27.070 76.362 105.735 1.00 39.23       C
ATOM 15098 F41 GW3 D 500    27.358 77.126 106.788 1.00 39.59       F
ATOM 15099 F40 GW3 D 500    27.575 76.876 104.610 1.00 41.53       F
ATOM 15100 F42 GW3 D 500    27.580 75.145 105.918 1.00 39.38       F
ATOM 15101 C08 GW3 D 500    21.717 76.170 108.940 1.00 17.07       C
ATOM 15104 C07 GW3 D 500    20.438 77.064 108.875 1.00 16.36       C
ATOM 15106 C01 GW3 D 500    20.374 77.962 110.062 1.00 11.02       C
ATOM 15107 C02 GW3 D 500    21.519 78.494 110.615 1.00 10.22       C
ATOM 15109 C03 GW3 D 500    21.426 79.284 111.743 1.00 12.67       C
ATOM 15111 C04 GW3 D 500    20.203 79.550 112.321 1.00 10.69       C
ATOM 15113 C05 GW3 D 500    19.072 79.006 111.767 1.00 11.38       C
ATOM 15115 C06 GW3 D 500    19.151 78.212 110.639 1.00 9.62        C
ATOM 15117 C10 GW3 D 500    20.374 77.856 107.634 1.00 14.02       C
ATOM 15118 C11 GW3 D 500    19.252 77.742 106.835 1.00 14.79       C
ATOM 15120 C12 GW3 D 500    19.178 78.464 105.639 1.00 15.98       C
ATOM 15122 C13 GW3 D 500    20.230 79.295 105.247 1.00 15.10       C
ATOM 15124 C14 GW3 D 500    21.350 79.408 106.057 1.00 16.14       C
ATOM 15126 C15 GW3 D 500    21.419 78.684 107.256 1.00 15.70       C
ATOM 15128 OH2 HOH X 1      18.790 0.840 49.638 1.00 22.14         O
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| ATOM | 15131 | OH2 HOH X | 2 | 4.938 | 10.777 | 59.364 | 1.00 37.13 | O |
|---|---|---|---|---|---|---|---|---|
| ATOM | 15134 | OH2 HOH X | 3 | 18.192 | 16.160 | 44.592 | 1.00 37.55 | O |
| ATOM | 15137 | OH2 HOH X | 4 | 17.987 | 8.850 | 28.963 | 1.00 27.85 | O |
| ATOM | 15140 | OH2 HOH X | 5 | 40.090 | 11.660 | 53.242 | 1.00 30.61 | O |
| ATOM | 15143 | OH2 HOH X | 6 | 2.908 | 108.597 | 106.139 | 1.00 26.43 | O |
| ATOM | 15146 | OH2 HOH X | 7 | 14.579 | 16.383 | 31.965 | 1.00 21.09 | O |
| ATOM | 15149 | OH2 HOH X | 8 | 27.923 | 32.560 | 63.897 | 1.00 26.46 | O |
| ATOM | 15152 | OH2 HOH X | 9 | 18.516 | 103.152 | 118.880 | 1.00 46.43 | O |
| ATOM | 15155 | OH2 HOH X | 10 | 35.600 | 11.075 | 53.954 | 1.00 35.17 | O |
| ATOM | 15158 | OH2 HOH X | 11 | 17.891 | 86.433 | 116.773 | 1.00 28.72 | O |
| ATOM | 15161 | OH2 HOH X | 12 | 20.659 | 102.067 | 106.686 | 1.00 39.04 | O |
| ATOM | 15164 | OH2 HOH X | 13 | 6.255 | 5.594 | 60.601 | 1.00 35.66 | O |
| ATOM | 15167 | OH2 HOH X | 14 | 12.446 | 10.305 | 34.580 | 1.00 33.82 | O |
| ATOM | 15170 | OH2 HOH X | 15 | 21.905 | 103.033 | 119.421 | 1.00 46.04 | O |
| ATOM | 15173 | OH2 HOH X | 16 | 15.495 | 79.869 | 119.859 | 1.00 27.60 | O |
| ATOM | 15176 | OH2 HOH X | 17 | 22.863 | 11.320 | 39.642 | 1.00 41.61 | O |
| ATOM | 15179 | OH2 HOH X | 18 | 8.709 | 0.631 | 56.792 | 1.00 38.76 | O |
| ATOM | 15182 | OH2 HOH X | 19 | 7.037 | 9.215 | 65.433 | 1.00 43.83 | O |
| ATOM | 15185 | OH2 HOH X | 20 | 54.635 | 7.068 | 56.437 | 1.00 41.98 | O |
| ATOM | 15188 | OH2 HOH X | 21 | 42.480 | 26.500 | 64.819 | 1.00 41.55 | O |
| ATOM | 15191 | OH2 HOH X | 22 | 8.305 | 5.264 | 32.612 | 1.00 41.61 | O |
| ATOM | 15194 | OH2 HOH X | 23 | 23.420 | -0.054 | 51.116 | 1.00 34.49 | O |
| ATOM | 15197 | OH2 HOH X | 24 | 37.247 | 30.829 | 49.611 | 1.00 33.54 | O |
| ATOM | 15200 | OH2 HOH X | 25 | 15.797 | 113.527 | 113.002 | 1.00 44.57 | O |
| ATOM | 15203 | OH2 HOH X | 26 | 16.914 | 8.250 | 46.298 | 1.00 32.98 | O |
| ATOM | 15206 | OH2 HOH X | 27 | 24.058 | 37.767 | 62.019 | 1.00 46.39 | O |
| ATOM | 15209 | OH2 HOH X | 28 | 7.479 | 85.903 | 114.822 | 1.00 38.76 | O |
| ATOM | 15212 | OH2 HOH X | 29 | -0.801 | 10.033 | 48.373 | 1.00 28.12 | O |
| ATOM | 15215 | OH2 HOH X | 30 | 25.359 | 6.806 | 37.379 | 1.00 44.68 | O |
| ATOM | 15218 | OH2 HOH X | 31 | 26.245 | 22.106 | 65.105 | 1.00 44.09 | O |
| ATOM | 15221 | OH2 HOH X | 32 | 3.043 | 26.213 | 48.170 | 1.00 39.25 | O |
| ATOM | 15224 | OH2 HOH X | 33 | 14.270 | 108.533 | 121.439 | 1.00 45.88 | O |
| ATOM | 15227 | OH2 HOH X | 34 | 25.897 | 99.315 | 110.080 | 1.00 49.71 | O |
| ATOM | 15230 | OH2 HOH X | 35 | 39.275 | 38.100 | 54.172 | 1.00 34.47 | O |
| ATOM | 15233 | OH2 HOH X | 36 | 12.488 | 90.316 | 114.086 | 1.00 30.18 | O |
| ATOM | 15236 | OH2 HOH X | 37 | 13.583 | 83.713 | 117.672 | 1.00 24.50 | O |
| ATOM | 15239 | OH2 HOH X | 38 | 7.331 | 87.765 | 116.864 | 1.00 38.02 | O |
| ATOM | 15242 | OH2 HOH X | 39 | 40.322 | 4.034 | 51.416 | 1.00 45.41 | O |
| ATOM | 15245 | OH2 HOH X | 40 | 38.097 | 9.828 | 60.620 | 1.00 32.43 | O |
| ATOM | 15248 | OH2 HOH X | 41 | 19.891 | 15.332 | 48.107 | 1.00 51.05 | O |
| ATOM | 15251 | OH2 HOH X | 42 | 35.963 | 16.094 | 59.088 | 1.00 27.23 | O |
| ATOM | 15254 | OH2 HOH X | 43 | 22.170 | 4.237 | 49.614 | 1.00 41.38 | O |
| ATOM | 15257 | OH2 HOH X | 44 | 16.930 | 1.886 | 36.884 | 1.00 29.31 | O |
| ATOM | 15260 | OH2 HOH X | 45 | 20.557 | 2.022 | 40.300 | 1.00 34.55 | O |
| ATOM | 15263 | OH2 HOH X | 46 | 8.116 | 2.675 | 58.430 | 1.00 37.39 | O |
| ATOM | 15266 | OH2 HOH X | 47 | 6.631 | 23.602 | 49.344 | 1.00 33.65 | O |
| ATOM | 15269 | OH2 HOH X | 48 | 29.292 | 18.080 | 63.496 | 1.00 41.30 | O |
| ATOM | 15272 | OH2 HOH X | 49 | 21.029 | 10.754 | 52.135 | 1.00 28.27 | O |

ATOM 15275 OH2 HOH X 50    40.045  7.948  61.610  1.00 39.89    O
ATOM 15278 OH2 HOH X 51    30.259  15.117  54.039  1.00 32.35    O
ATOM 15281 OH2 HOH X 52    4.686  6.030  36.466  1.00 44.52    O
ATOM 15284 OH2 HOH X 53    -0.309 104.932 109.683  1.00 43.95    O
ATOM 15287 OH2 HOH X 54    37.761  8.149  51.122  1.00 34.45    O
ATOM 15290 OH2 HOH X 55    33.116  10.370  57.122  1.00 38.57    O
ATOM 15293 OH2 HOH X 56    25.873  83.678 100.088  1.00 57.88    O
ATOM 15296 OH2 HOH X 57    22.062  -4.925  44.017  1.00 68.59    O
ATOM 15299 OH2 HOH X 58    5.594  0.015  62.950  1.00 33.01    O
ATOM 15302 OH2 HOH X 59    21.344  0.929  49.329  1.00 35.86    O
ATOM 15305 OH2 HOH X 60    23.011  80.836  97.026  1.00 44.93    O
ATOM 15308 OH2 HOH X 61    38.255  9.351  53.248  1.00 38.17    O
ATOM 15311 OH2 HOH X 62    3.401  9.718  42.821  1.00 32.45    O
ATOM 15314 OH2 HOH X 63    54.581  10.732  50.027  1.00 36.65    O
ATOM 15317 OH2 HOH X 64    18.363  1.123  39.091  1.00 35.93    O
ATOM 15320 OH2 HOH X 65    39.035  16.456  71.109  1.00 34.41    O
ATOM 15323 OH2 HOH X 66    19.864  12.477  50.045  1.00 35.67    O
ATOM 15326 OH2 HOH X 67    4.671  81.137 115.138  1.00 57.79    O
ATOM 15329 OH2 HOH X 68    13.701  26.691  60.440  1.00 43.05    O
ATOM 15332 OH2 HOH X 69    8.689  99.115 108.556  1.00 50.21    O
ATOM 15335 OH2 HOH X 70    8.632  0.913  39.567  1.00 55.13    O
ATOM 15338 OH2 HOH X 71    44.439  0.230  51.503  1.00 41.75    O
ATOM 15341 OH2 HOH X 72    31.733  15.438  73.923  1.00 43.62    O
ATOM 15344 OH2 HOH X 73    33.724  35.582  45.322  1.00 59.46    O
ATOM 15347 OH2 HOH X 74    22.663  -5.001  74.941  1.00 48.52    O
ATOM 15350 OH2 HOH X 75    15.244  79.241 122.471  1.00 33.27    O
ATOM 15353 OH2 HOH X 76    -1.636  9.989  50.713  1.00 35.08    O
ATOM 15356 OH2 HOH X 77    2.873 122.362 104.765  1.00 53.58    O
ATOM 15359 OH2 HOH X 78    52.828  5.694  54.544  1.00 51.46    O
ATOM 15362 OH2 HOH X 79    21.239  28.542  44.653  1.00 46.33    O
ATOM 15365 OH2 HOH X 80    15.730  61.732 102.489  1.00 56.97    O
ATOM 15368 OH2 HOH X 81    30.963 100.646  95.162  1.00 58.22    O
ATOM 15371 OH2 HOH X 82    47.472  -0.901  51.679  1.00 71.44    O
ATOM 15374 OH2 HOH X 83    14.125  61.063 100.439  1.00 69.04    O
ATOM 15377 OH2 HOH X 84    29.954  16.118  56.622  1.00 31.88    O
ATOM 15380 OH2 HOH X 85    48.226  19.437  66.814  1.00 59.42    O
ATOM 15383 OH2 HOH X 86    34.195  5.437  65.636  1.00 49.75    O
ATOM 15386 OH2 HOH X 87    17.214  94.595 120.054  1.00 44.08    O
ATOM 15389 OH2 HOH X 88    -1.485  26.765  48.129  1.00 47.47    O
ATOM 15392 OH2 HOH X 89    43.065  31.378  62.592  1.00 44.61    O
ATOM 15395 OH2 HOH X 90    21.758  15.965  46.909  1.00 48.82    O
ATOM 15398 OH2 HOH X 91    52.344  29.369  43.701  1.00 54.42    O
ATOM 15401 OH2 HOH X 92    6.651  77.153 110.860  1.00 51.64    O
ATOM 15404 OH2 HOH X 93    0.475  17.406  46.849  1.00 40.89    O
ATOM 15407 OH2 HOH X 94    50.234  25.863  52.532  1.00 65.87    O
ATOM 15410 OH2 HOH X 95    4.877  85.178 115.055  1.00 47.96    O
ATOM 15413 OH2 HOH X 96    0.040  19.957  47.655  1.00 59.57    O
ATOM 15416 OH2 HOH X 97    27.106  32.993  66.183  1.00 36.27    O

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ATOM 15419 OH2 HOH X 98    14.955  25.599  61.997  1.00 58.33      O
ATOM 15422 OH2 HOH X 99    38.131   8.445  58.231  1.00 35.80      O
ATOM 15425 OH2 HOH X 100   26.311   7.055  62.966  1.00 42.34      O
ATOM 15428 OH2 HOH X 101   -0.177   6.206  43.909  1.00 42.96      O
ATOM 15431 OH2 HOH X 102   35.146  74.240 103.309  1.00 64.14      O
ATOM 15434 OH2 HOH X 103   30.052   5.476  40.804  1.00 60.77      O
ATOM 15437 OH2 HOH X 104   10.184  12.725  34.015  1.00 51.28      O
ATOM 15440 OH2 HOH X 105   50.966  22.574  48.701  1.00 42.22      O
ATOM 15443 OH2 HOH X 106    2.828  11.507  41.214  1.00 52.52      O
ATOM 15446 OH2 HOH X 107    0.946  27.042  58.798  1.00 58.46      O
ATOM 15449 OH2 HOH X 108   30.446  27.155  42.836  1.00 51.90      O
ATOM 15452 OH2 HOH X 109   36.763   7.541  31.764  1.00 62.01      O
ATOM 15455 OH2 HOH X 110   13.380  98.632 108.720  1.00 37.74      O
ATOM 15458 OH2 HOH X 111   20.449   4.213  42.272  1.00 35.49      O
ATOM 15461 OH2 HOH X 112   37.312  38.390  53.133  1.00 51.36      O
ATOM 15464 OH2 HOH X 113   19.000  10.393  72.193  1.00 50.84      O
ATOM 15467 OH2 HOH X 114   17.903  84.774  91.200  1.00 60.01      O
ATOM 15470 OH2 HOH X 115   18.055  -1.585  39.255  1.00 56.00      O
ATOM 15473 OH2 HOH X 116    3.996   6.993  60.999  1.00 49.86      O
ATOM 15476 OH2 HOH X 117   20.271  10.535  30.631  1.00 42.61      O
ATOM 15479 OH2 HOH X 118   11.263  -9.614  71.116  1.00 42.90      O
ATOM 15482 OH2 HOH X 119   -2.695  12.950  57.487  1.00 37.29      O
ATOM 15485 OH2 HOH X 120   29.885 -23.535  52.934  1.00 77.91      O
ATOM 15488 OH2 HOH X 121   -2.616   7.551  45.678  1.00 47.99      O
ATOM 15491 OH2 HOH X 122   -2.824  10.741  58.817  1.00 42.09      O
ATOM 15494 OH2 HOH X 123   26.639 111.044 114.619  1.00 57.82      O
ATOM 15497 OH2 HOH X 124   16.140  88.966  97.087  1.00 57.17      O
ATOM 15500 OH2 HOH X 125   17.235 127.107 106.446  1.00 53.73      O
ATOM 15503 OH2 HOH X 126   21.952   2.395  44.236  1.00 42.93      O
ATOM 15506 OH2 HOH X 127    9.277  74.512 114.665  1.00 48.97      O
ATOM 15509 OH2 HOH X 128   17.683  78.291 123.117  1.00 48.65      O
ATOM 15512 OH2 HOH X 129    1.510 120.767 105.909  1.00 50.36      O
ATOM 15515 OH2 HOH X 130   43.242   6.582  58.231  1.00 62.99      O
ATOM 15518 OH2 HOH X 131   15.242  61.390 105.392  1.00 59.52      O
ATOM 15521 OH2 HOH X 132   -7.813  16.881  54.110  1.00 54.24      O
ATOM 15524 OH2 HOH X 133   39.761  32.790  49.685  1.00 50.24      O
ATOM 15527 OH2 HOH X 134    5.502 102.442 113.079  1.00 54.03      O
ATOM 15530 OH2 HOH X 135    5.245  83.800 107.181  1.00 56.11      O
ATOM 15533 OH2 HOH X 136    9.888 -10.585  68.838  1.00 62.25      O
ATOM 15536 OH2 HOH X 137   18.053  89.757 110.269  1.00 57.84      O
ATOM 15539 OH2 HOH X 138   20.049 122.164 106.270  1.00 69.14      O
ATOM 15542 OH2 HOH X 139    2.434   9.115  59.663  1.00 48.87      O
ATOM 15545 OH2 HOH X 140   29.074   7.062  34.979  1.00 61.08      O
ATOM 15548 OH2 HOH X 141   15.999  19.969  68.679  1.00 54.12      O
ATOM 15551 OH2 HOH X 142    7.714  17.165  68.472  1.00 60.71      O
ATOM 15554 OH2 HOH X 143    4.115  13.818  66.067  1.00 59.59      O
ATOM 15557 OH2 HOH X 144   50.125  11.901  55.483  1.00 48.36      O
ATOM 15560 OH2 HOH X 145   14.393  30.385  44.476  1.00 57.65      O
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ATOM  15563  OH2 HOH X 146     2.986 -16.653  58.015  1.00 54.32      O
ATOM  15566  OH2 HOH X 147    13.508  77.817 123.053  1.00 47.73      O
ATOM  15569  OH2 HOH X 148    30.902  -8.372  64.994  1.00 57.51      O
ATOM  15572  OH2 HOH X 149    21.360  40.987  59.280  1.00 61.05      O
ATOM  15575  OH2 HOH X 150    31.566   0.933  61.366  1.00 47.84      O
ATOM  15578  OH2 HOH X 151    25.717  98.206 123.290  1.00 56.66      O
ATOM  15581  OH2 HOH X 152    24.279   0.340  77.562  1.00 58.47      O
ATOM  15584  OH2 HOH X 153    47.547  -0.197  46.911  1.00 58.77      O
ATOM  15587  OH2 HOH X 154    13.581  28.505  62.736  1.00 55.78      O
ATOM  15590  OH2 HOH X 155    15.868  67.635 118.108  1.00 63.74      O
ATOM  15593  OH2 HOH X 156     6.738  99.064 109.444  1.00 66.64      O
ATOM  15596  OH2 HOH X 157    39.958   7.874  54.949  1.00 63.85      O
ATOM  15599  OH2 HOH X 158     7.403  91.557 109.576  1.00 55.77      O
ATOM  15602  OH2 HOH X 159     5.726  12.892  33.667  1.00 41.75      O
ATOM  15605  OH2 HOH X 160    28.386  37.421  67.590  1.00 50.20      O
ATOM  15608  OH2 HOH X 161    21.402  14.875  66.629  1.00 55.99      O
ATOM  15611  OH2 HOH X 162    48.282   7.498  59.343  1.00 64.22      O
ATOM  15614  OH2 HOH X 163     6.367   7.912  33.782  1.00 55.31      O
ATOM  15617  OH2 HOH X 164    22.722  62.779 126.079  1.00 56.29      O
ATOM  15620  OH2 HOH X 165     8.660  73.673 117.316  1.00 39.82      O
ATOM  15623  OH2 HOH X 166    39.448   1.815  50.281  1.00 52.32      O
ATOM  15626  OH2 HOH X 167    62.599  23.311  47.584  1.00 61.70      O
END
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REMARK
TITLE    HUMAN LXR BETA HORMONE RECEPTOR COMPLEXED WITH
TITLE   2 KB008444/T0901317 COMPLEX
REMARK
REMARK  ATOMIC COORDINATES OF A CRYSTAL STRUCTURE
REMARK
REMARK  DEPOSITOR: MATHIAS FARNEGARDH
(MATHIAS.FARNEGARDH@KAROBIO.SE)
REMARK  DEPOSITION DATE 5-SEP-2002
REMARK
REMARK  THE ATOMIC COORDINATES AND/OR STRUCTURE FACTORS IN
THIS FILE ARE THE
REMARK  EXPERIMENTAL RESULTS OF:
REMARK
REMARK  MATHIAS FARNEGARDH, KARO BIO AB
REMARK  NOVUM, 141 57 HUDDINGE, SWEDEN
REMARK
REMARK IMPORTANT NOTE #############
REMARK  THIS DATA WAS COLLECTED RAPIDLY ON AN HOME SOURCE
(RIGAKU RU300)
REMARK  TO DECREASE THE AMOUNT OF LIGAND SPLITTING THE
RESOLUTION IS DUE TO
REMARK  THIS ONLY 2.9 A. IN ORDER TO TAKE ADVANTAGE OF THE HIGH
RESOLUTION
REMARK  STRUCTURE OF THIS COMPLEX (WHERE THE LIGAND IS SPLIT BY
XRAY RADIATION)
REMARK  WAS THE HIGH RESOLUTION STRUCTURE lxrb_KB008444_split.pdb
USED AS THE
REMARK  STARTING MODEL FOR THIS REFINEMENT INCLUDING ALL THE
WATERS.
REAMRK  THE DIFFERENCES BETWEEN THE TWO STRUCTURES ARE ONLY
LOCATED AT THE N-S
REMARK  SPLITTING POINT OF THE LIGAND.
REMARK
REMARK  THIS ENTRY CONTAINS THE COMPLETE CONTENT OF THE
ASYMETRIC UNIT

REMARK  THAT COULD BE BUILT INTO INTERPRETABLE ELECTRON DENSITIES
REMARK  IT CONTAINS 4 INDEPENDENTLY REFINED PROTEIN MONOMERS
REMARK  CHAIN A 220-253, 261-458
REMARK  A500 IS THE LIGAND
REMARK  CHAIN B 219-258, 261-458 (GLN219,LEU330 MODELLED AS ALA)
REMARK  B500 IS THE LIGAND
REMARK  CHAIN C 220-243, 248-254, 259-458
REMARK  C500 IS THE LIGAND
REMARK  CHAIN D 220-242, 249-252, 260-329, 333-443, 448-458
REMARK  (PHE329 MODELLED AS ALA) D500 IS THE LIGAND
REMARK  THE PROTEIN CRYSTALLIZED CONTAIN RESIDUES 213-461, THE GAPS IN THE
REMARK  STRUCTURE ARE DUE TO UNINTERPRETABLE ELECTRONDENSITIES IN THESE
REMARK  PARTICULAR REGIONS
HEADER    LXRB+KB008444/T0901317         05-SEP-02  XXXX
COMPND   MOL_ID: 1;
COMPND   2 MOLECULE: LIVER X RECEPTOR BETA;
COMPND   3 CHAIN: A, B, C, D;
COMPND   4 FRAGMENT: LIGAND BINDING DOMAIN;
COMPND   5 SYNONYM: LXRB;
REMARK  3
REMARK  3 REFINEMENT.
REMARK  3   PROGRAM    : REFMAC 5.1.19
REMARK  3   AUTHORS    : MURSHUDOV,VAGIN,DODSON
REMARK  3
REMARK  3   REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK  3
REMARK  3 DATA USED IN REFINEMENT.
REMARK  3   RESOLUTION RANGE HIGH (ANGSTROMS) :  2.80
REMARK  3   RESOLUTION RANGE LOW  (ANGSTROMS) : 40.00
REMARK  3   DATA CUTOFF     (SIGMA(F)) : NONE
REMARK  3   COMPLETENESS FOR RANGE    (%) : 99.91
REMARK  3   NUMBER OF REFLECTIONS    :  25718
REMARK  3
REMARK  3 FIT TO DATA USED IN REFINEMENT.
REMARK  3   CROSS-VALIDATION METHOD    : THROUGHOUT
REMARK  3   FREE R VALUE TEST SET SELECTION : RANDOM
REMARK  3   R VALUE   (WORKING + TEST SET) : 0.19861
REMARK  3   R VALUE     (WORKING SET) : 0.19526
REMARK  3   FREE R VALUE     : 0.26170
REMARK  3   FREE R VALUE TEST SET SIZE  (%) : 5.1
REMARK  3   FREE R VALUE TEST SET COUNT   : 1381
REMARK  3
REMARK  3 FIT IN THE HIGHEST RESOLUTION BIN.
REMARK  3   TOTAL NUMBER OF BINS USED    :   20
REMARK  3   BIN RESOLUTION RANGE HIGH    :  2.800

REMARK  3  BIN RESOLUTION RANGE LOW          :  2.872
REMARK  3  REFLECTION IN BIN    (WORKING SET) :    1831
REMARK  3  BIN R VALUE          (WORKING SET) :   0.279
REMARK  3  BIN FREE R VALUE SET COUNT        :     100
REMARK  3  BIN FREE R VALUE                  :   0.348
REMARK  3
REMARK  3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK  3   ALL ATOMS        :    7782
REMARK  3
REMARK  3  B VALUES.
REMARK  3   FROM WILSON PLOT        (A**2) : NULL
REMARK  3   MEAN B VALUE     (OVERALL, A**2) : 24.302
REMARK  3   OVERALL ANISOTROPIC B VALUE.
REMARK  3    B11 (A**2) :   0.01
REMARK  3    B22 (A**2) :   1.29
REMARK  3    B33 (A**2) :  -1.30
REMARK  3    B12 (A**2) :   0.00
REMARK  3    B13 (A**2) :   0.00
REMARK  3    B23 (A**2) :   0.00
REMARK  3
REMARK  3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK  3   ESU BASED ON R VALUE                    (A): NULL
REMARK  3   ESU BASED ON FREE R VALUE          (A):  0.410
REMARK  3   ESU BASED ON MAXIMUM LIKELIHOOD       (A):  0.305
REMARK  3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):
15.914
REMARK  3
REMARK  3 CORRELATION COEFFICIENTS.
REMARK  3   CORRELATION COEFFICIENT FO-FC   :  0.935
REMARK  3   CORRELATION COEFFICIENT FO-FC FREE :  0.892
REMARK  3
REMARK  3 RMS DEVIATIONS FROM IDEAL VALUES      COUNT   RMS
WEIGHT
REMARK  3  BOND LENGTHS REFINED ATOMS     (A): 7745 ; 0.016 ; 0.022
REMARK  3  BOND LENGTHS OTHERS          (A): 7177 ; 0.002 ; 0.020
REMARK  3  BOND ANGLES REFINED ATOMS  (DEGREES): 10502 ; 1.490 ; 1.980
REMARK  3  BOND ANGLES OTHERS        (DEGREES): 16631 ; 0.842 ; 3.000
REMARK  3  TORSION ANGLES, PERIOD 1   (DEGREES):  908 ; 5.804 ; 5.000
REMARK  3  CHIRAL-CENTER RESTRAINTS     (A**3): 1189 ; 0.074 ; 0.200
REMARK  3  GENERAL PLANES REFINED ATOMS     (A): 8385 ; 0.005 ; 0.020
REMARK  3  GENERAL PLANES OTHERS          (A): 1612 ; 0.002 ; 0.020
REMARK  3  NON-BONDED CONTACTS REFINED ATOMS (A): 1833 ; 0.215 ;
0.200
REMARK  3  NON-BONDED CONTACTS OTHERS     (A): 8222 ; 0.224 ; 0.200
REMARK  3  NON-BONDED TORSION OTHERS      (A): 4710 ; 0.088 ; 0.200
REMARK  3  H-BOND (X...Y) REFINED ATOMS   (A):  208 ; 0.180 ; 0.200
REMARK  3  SYMMETRY VDW REFINED ATOMS     (A):   20 ; 0.205 ; 0.200
REMARK  3  SYMMETRY VDW OTHERS          (A):   81 ; 0.243 ; 0.200

REMARK  3  SYMMETRY H-BOND REFINED ATOMS    (A):   11 ; 0.126 ; 0.200
REMARK  3
REMARK  3  ISOTROPIC THERMAL FACTOR RESTRAINTS.    COUNT   RMS
WEIGHT
REMARK  3  MAIN-CHAIN BOND REFINED ATOMS (A**2): 4613 ; 0.581 ; 1.500
REMARK  3  MAIN-CHAIN ANGLE REFINED ATOMS (A**2): 7458 ; 1.145 ; 2.000
REMARK  3  SIDE-CHAIN BOND REFINED ATOMS  (A**2): 3132 ; 1.659 ; 3.000
REMARK  3  SIDE-CHAIN ANGLE REFINED ATOMS (A**2): 3044 ; 3.050 ; 4.500
REMARK  3
REMARK  3  NCS RESTRAINTS STATISTICS
REMARK  3   NUMBER OF NCS GROUPS : NULL
REMARK  3
REMARK  3
REMARK  3  TLS DETAILS
REMARK  3   NUMBER OF TLS GROUPS  : NULL
REMARK  3
REMARK  3
REMARK  3  BULK SOLVENT MODELLING.
REMARK  3   METHOD USED : BABINET MODEL WITH MASK
REMARK  3   PARAMETERS FOR MASK CALCULATION
REMARK  3   VDW PROBE RADIUS  :  1.40
REMARK  3   ION PROBE RADIUS  :  0.80
REMARK  3   SHRINKAGE RADIUS  :  0.80
REMARK  3
REMARK  3  OTHER REFINEMENT REMARKS:
REMARK  3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK  3
LINK        PRO A 253        ALA A 261            gap
LINK        PRO B 258        ALA B 261            gap
LINK        PHE C 243        LYS C 248            gap
LINK        ALA C 254        GLN C 259            gap
LINK        SER D 242        VAL D 249            gap
LINK        TRP D 252        ALA D 260            gap
LINK        ALA D 329        PHE D 333            gap
LINK        ARG D 443        LYS D 448            gap
CRYST1  58.722 103.262 176.002 90.00  90.00  90.00 P 21 21 21
SCALE1    0.017029 0.000000 0.000000     0.00000
SCALE2    0.000000 0.009684 0.000000     0.00000
SCALE3    0.000000 0.000000 0.005682     0.00000
ATOM    1 N  LEU A 220      5.857  8.165 59.175 1.00 15.68      N
ATOM    3 CA LEU A 220      4.611  8.973 59.427 1.00 17.29      C
ATOM    5 CB LEU A 220      3.715  9.000 58.174 1.00 17.72      C
ATOM    8 CG LEU A 220      3.555 10.232 57.242 1.00 20.46      C
ATOM   10 CD1 LEU A 220     2.059 10.393 56.770 1.00 21.48      C
ATOM   14 CD2 LEU A 220     4.105 11.593 57.820 1.00 21.78      C
ATOM   18 C  LEU A 220      3.778  8.419 60.590 1.00 16.81      C
ATOM   19 O  LEU A 220      3.383  7.253 60.556 1.00 16.85      O
ATOM   22 N  THR A 221      3.473  9.239 61.599 1.00 16.32      N

| ATOM | 24 | CA | THR A 221 | 2.793 | 8.735 | 62.803 | 1.00 | 15.78 | C |
| ATOM | 26 | CB | THR A 221 | 3.025 | 9.631 | 64.051 | 1.00 | 15.47 | C |
| ATOM | 28 | OG1 | THR A 221 | 2.506 | 10.944 | 63.837 | 1.00 | 15.57 | O |
| ATOM | 30 | CG2 | THR A 221 | 4.477 | 9.849 | 64.317 | 1.00 | 15.58 | C |
| ATOM | 34 | C | THR A 221 | 1.310 | 8.607 | 62.597 | 1.00 | 15.91 | C |
| ATOM | 35 | O | THR A 221 | 0.751 | 9.250 | 61.717 | 1.00 | 16.20 | O |
| ATOM | 36 | N | ALA A 222 | 0.669 | 7.802 | 63.447 | 1.00 | 16.12 | N |
| ATOM | 38 | CA | ALA A 222 | -0.792 | 7.607 | 63.422 | 1.00 | 15.82 | C |
| ATOM | 40 | CB | ALA A 222 | -1.269 | 6.776 | 64.623 | 1.00 | 15.57 | C |
| ATOM | 44 | C | ALA A 222 | -1.487 | 8.948 | 63.416 | 1.00 | 15.68 | C |
| ATOM | 45 | O | ALA A 222 | -2.431 | 9.165 | 62.664 | 1.00 | 16.24 | O |
| ATOM | 46 | N | ALA A 223 | -1.010 | 9.854 | 64.251 | 1.00 | 15.26 | N |
| ATOM | 48 | CA | ALA A 223 | -1.606 | 11.168 | 64.343 | 1.00 | 15.26 | C |
| ATOM | 50 | CB | ALA A 223 | -1.026 | 11.901 | 65.538 | 1.00 | 15.52 | C |
| ATOM | 54 | C | ALA A 223 | -1.397 | 11.968 | 63.046 | 1.00 | 15.37 | C |
| ATOM | 55 | O | ALA A 223 | -2.247 | 12.750 | 62.660 | 1.00 | 14.83 | O |
| ATOM | 56 | N | GLN A 224 | -0.264 | 11.767 | 62.381 | 1.00 | 15.80 | N |
| ATOM | 58 | CA | GLN A 224 | -0.005 | 12.423 | 61.108 | 1.00 | 16.16 | C |
| ATOM | 60 | CB | GLN A 224 | 1.479 | 12.350 | 60.734 | 1.00 | 16.24 | C |
| ATOM | 63 | CG | GLN A 224 | 2.383 | 13.329 | 61.487 | 1.00 | 15.36 | C |
| ATOM | 66 | CD | GLN A 224 | 3.857 | 13.076 | 61.233 | 1.00 | 13.69 | C |
| ATOM | 67 | OE1 | GLN A 224 | 4.276 | 11.933 | 61.080 | 1.00 | 11.58 | O |
| ATOM | 68 | NE2 | GLN A 224 | 4.642 | 14.144 | 61.171 | 1.00 | 12.35 | N |
| ATOM | 71 | C | GLN A 224 | -0.856 | 11.847 | 59.987 | 1.00 | 16.83 | C |
| ATOM | 72 | O | GLN A 224 | -1.344 | 12.586 | 59.155 | 1.00 | 17.50 | O |
| ATOM | 73 | N | GLU A 225 | -1.044 | 10.541 | 59.944 | 1.00 | 17.54 | N |
| ATOM | 75 | CA | GLU A 225 | -1.918 | 9.962 | 58.938 | 1.00 | 18.71 | C |
| ATOM | 77 | CB | GLU A 225 | -1.919 | 8.421 | 58.996 | 1.00 | 19.80 | C |
| ATOM | 80 | CG | GLU A 225 | -0.583 | 7.718 | 58.708 | 1.00 | 22.22 | C |
| ATOM | 83 | CD | GLU A 225 | -0.739 | 6.189 | 58.646 | 1.00 | 27.82 | C |
| ATOM | 84 | OE1 | GLU A 225 | -1.896 | 5.694 | 58.806 | 1.00 | 29.83 | O |
| ATOM | 85 | OE2 | GLU A 225 | 0.279 | 5.463 | 58.427 | 1.00 | 29.75 | O |
| ATOM | 86 | C | GLU A 225 | -3.326 | 10.487 | 59.160 | 1.00 | 18.57 | C |
| ATOM | 87 | O | GLU A 225 | -3.972 | 10.912 | 58.236 | 1.00 | 18.55 | O |
| ATOM | 88 | N | LEU A 226 | -3.788 | 10.489 | 60.401 | 1.00 | 19.06 | N |
| ATOM | 90 | CA | LEU A 226 | -5.087 | 11.076 | 60.747 | 1.00 | 19.53 | C |
| ATOM | 92 | CB | LEU A 226 | -5.351 | 11.028 | 62.260 | 1.00 | 19.76 | C |
| ATOM | 95 | CG | LEU A 226 | -6.612 | 11.759 | 62.761 | 1.00 | 19.44 | C |
| ATOM | 97 | CD1 | LEU A 226 | -7.866 | 11.109 | 62.149 | 1.00 | 20.78 | C |
| ATOM | 101 | CD2 | LEU A 226 | -6.676 | 11.739 | 64.269 | 1.00 | 18.94 | C |
| ATOM | 105 | C | LEU A 226 | -5.283 | 12.516 | 60.326 | 1.00 | 19.84 | C |
| ATOM | 106 | O | LEU A 226 | -6.391 | 12.892 | 59.964 | 1.00 | 20.69 | O |
| ATOM | 107 | N | MET A 227 | -4.260 | 13.348 | 60.435 | 1.00 | 20.12 | N |
| ATOM | 109 | CA | MET A 227 | -4.448 | 14.759 | 60.126 | 1.00 | 20.67 | C |
| ATOM | 111 | CB | MET A 227 | -3.305 | 15.603 | 60.675 | 1.00 | 21.19 | C |
| ATOM | 114 | CG | MET A 227 | -2.751 | 16.682 | 59.708 | 1.00 | 23.98 | C |
| ATOM | 117 | SD | MET A 227 | -1.252 | 17.480 | 60.399 | 1.00 | 30.33 | S |
| ATOM | 118 | CE | MET A 227 | -1.757 | 17.793 | 62.100 | 1.00 | 29.41 | C |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ATOM | 122 | C | MET A 227 | -4.578 | 14.927 | 58.616 | 1.00 | 20.11 | C |
| ATOM | 123 | O | MET A 227 | -5.464 | 15.629 | 58.148 | 1.00 | 20.30 | O |
| ATOM | 124 | N | ILE A 228 | -3.705 | 14.257 | 57.878 | 1.00 | 19.29 | N |
| ATOM | 126 | CA | ILE A 228 | -3.665 | 14.351 | 56.445 | 1.00 | 19.09 | C |
| ATOM | 128 | CB | ILE A 228 | -2.382 | 13.726 | 55.921 | 1.00 | 19.07 | C |
| ATOM | 130 | CG1 | ILE A 228 | -1.179 | 14.615 | 56.251 | 1.00 | 19.28 | C |
| ATOM | 133 | CD1 | ILE A 228 | 0.158 | 13.963 | 55.932 | 1.00 | 19.23 | C |
| ATOM | 137 | CG2 | ILE A 228 | -2.494 | 13.479 | 54.411 | 1.00 | 19.58 | C |
| ATOM | 141 | C | ILE A 228 | -4.863 | 13.670 | 55.794 | 1.00 | 19.43 | C |
| ATOM | 142 | O | ILE A 228 | -5.418 | 14.211 | 54.868 | 1.00 | 20.34 | O |
| ATOM | 143 | N | GLN A 229 | -5.256 | 12.477 | 56.223 | 1.00 | 18.90 | N |
| ATOM | 145 | CA | GLN A 229 | -6.478 | 11.882 | 55.706 | 1.00 | 18.96 | C |
| ATOM | 147 | CB | GLN A 229 | -6.771 | 10.577 | 56.413 | 1.00 | 19.24 | C |
| ATOM | 150 | CG | GLN A 229 | -6.067 | 9.435 | 55.768 | 1.00 | 21.27 | C |
| ATOM | 153 | CD | GLN A 229 | -6.010 | 8.229 | 56.651 | 1.00 | 24.10 | C |
| ATOM | 154 | OE1 | GLN A 229 | -6.948 | 7.971 | 57.423 | 1.00 | 25.47 | O |
| ATOM | 155 | NE2 | GLN A 229 | -4.905 | 7.479 | 56.560 | 1.00 | 25.45 | N |
| ATOM | 158 | C | GLN A 229 | -7.702 | 12.769 | 55.845 | 1.00 | 18.55 | C |
| ATOM | 159 | O | GLN A 229 | -8.583 | 12.732 | 55.011 | 1.00 | 18.22 | O |
| ATOM | 160 | N | GLN A 230 | -7.744 | 13.532 | 56.930 | 1.00 | 18.60 | N |
| ATOM | 162 | CA | GLN A 230 | -8.860 | 14.389 | 57.301 | 1.00 | 18.80 | C |
| ATOM | 164 | CB | GLN A 230 | -8.659 | 14.919 | 58.749 | 1.00 | 19.79 | C |
| ATOM | 167 | CG | GLN A 230 | -9.251 | 16.327 | 59.108 | 1.00 | 21.29 | C |
| ATOM | 170 | CD | GLN A 230 | -10.690 | 16.230 | 59.571 | 1.00 | 24.64 | C |
| ATOM | 171 | OE1 | GLN A 230 | -11.138 | 15.164 | 59.996 | 1.00 | 25.60 | O |
| ATOM | 172 | NE2 | GLN A 230 | -11.427 | 17.336 | 59.477 | 1.00 | 28.35 | N |
| ATOM | 175 | C | GLN A 230 | -8.945 | 15.538 | 56.342 | 1.00 | 18.30 | C |
| ATOM | 176 | O | GLN A 230 | -10.029 | 15.844 | 55.865 | 1.00 | 18.40 | O |
| ATOM | 177 | N | LEU A 231 | -7.800 | 16.196 | 56.106 | 1.00 | 17.65 | N |
| ATOM | 179 | CA | LEU A 231 | -7.691 | 17.326 | 55.185 | 1.00 | 17.02 | C |
| ATOM | 181 | CB | LEU A 231 | -6.276 | 17.900 | 55.178 | 1.00 | 17.01 | C |
| ATOM | 184 | CG | LEU A 231 | -5.827 | 18.554 | 56.489 | 1.00 | 17.61 | C |
| ATOM | 186 | CD1 | LEU A 231 | -4.435 | 19.164 | 56.398 | 1.00 | 17.30 | C |
| ATOM | 190 | CD2 | LEU A 231 | -6.815 | 19.591 | 56.908 | 1.00 | 18.68 | C |
| ATOM | 194 | C | LEU A 231 | -8.079 | 16.910 | 53.787 | 1.00 | 16.54 | C |
| ATOM | 195 | O | LEU A 231 | -8.848 | 17.571 | 53.144 | 1.00 | 16.65 | O |
| ATOM | 196 | N | VAL A 232 | -7.589 | 15.776 | 53.337 | 1.00 | 16.28 | N |
| ATOM | 198 | CA | VAL A 232 | -7.975 | 15.264 | 52.034 | 1.00 | 16.26 | C |
| ATOM | 200 | CB | VAL A 232 | -7.091 | 14.080 | 51.598 | 1.00 | 16.22 | C |
| ATOM | 202 | CG1 | VAL A 232 | -7.585 | 13.491 | 50.281 | 1.00 | 15.39 | C |
| ATOM | 206 | CG2 | VAL A 232 | -5.639 | 14.571 | 51.447 | 1.00 | 16.49 | C |
| ATOM | 210 | C | VAL A 232 | -9.463 | 14.925 | 51.955 | 1.00 | 15.99 | C |
| ATOM | 211 | O | VAL A 232 | -10.106 | 15.228 | 50.942 | 1.00 | 15.95 | O |
| ATOM | 212 | N | ALA A 233 | -10.010 | 14.319 | 53.006 | 1.00 | 15.67 | N |
| ATOM | 214 | CA | ALA A 233 | -11.416 | 13.939 | 53.011 | 1.00 | 15.76 | C |
| ATOM | 216 | CB | ALA A 233 | -11.722 | 13.041 | 54.167 | 1.00 | 15.74 | C |
| ATOM | 220 | C | ALA A 233 | -12.328 | 15.169 | 53.046 | 1.00 | 16.33 | C |
| ATOM | 221 | O | ALA A 233 | -13.417 | 15.150 | 52.468 | 1.00 | 15.95 | O |

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ATOM   222 N   ALA A 234   -11.893 16.231 53.720 1.00 16.96      N
ATOM   224 CA  ALA A 234   -12.667 17.465 53.756 1.00 17.94      C
ATOM   226 CB  ALA A 234   -12.205 18.373 54.910 1.00 18.20      C
ATOM   230 C   ALA A 234   -12.598 18.207 52.407 1.00 18.44      C
ATOM   231 O   ALA A 234   -13.595 18.714 51.965 1.00 18.63      O
ATOM   232 N   GLN A 235   -11.438 18.261 51.762 1.00 19.00      N
ATOM   234 CA  GLN A 235   -11.303 18.837 50.425 1.00 20.04      C
ATOM   236 CB  GLN A 235    -9.856 18.674 49.997 1.00 20.79      C
ATOM   239 CG  GLN A 235    -9.379 19.327 48.715 1.00 24.06      C
ATOM   242 CD  GLN A 235    -7.796 19.466 48.697 1.00 30.93      C
ATOM   243 OE1 GLN A 235    -7.021 18.452 48.747 1.00 31.11      O
ATOM   244 NE2 GLN A 235    -7.336 20.724 48.634 1.00 34.09      N
ATOM   247 C   GLN A 235   -12.213 18.115 49.435 1.00 19.95      C
ATOM   248 O   GLN A 235   -12.927 18.720 48.655 1.00 19.27      O
ATOM   249 N   LEU A 236   -12.199 16.800 49.490 1.00 20.56      N
ATOM   251 CA  LEU A 236   -13.036 16.017 48.616 1.00 21.32      C
ATOM   253 CB  LEU A 236   -12.757 14.522 48.786 1.00 21.67      C
ATOM   256 CG  LEU A 236   -13.341 13.700 47.626 1.00 24.13      C
ATOM   258 CD1 LEU A 236   -12.335 13.718 46.450 1.00 25.57      C
ATOM   262 CD2 LEU A 236   -13.777 12.237 48.015 1.00 25.18      C
ATOM   266 C   LEU A 236   -14.518 16.309 48.845 1.00 21.68      C
ATOM   267 O   LEU A 236   -15.252 16.390 47.872 1.00 22.07      O
ATOM   268 N   GLN A 237   -14.958 16.451 50.105 1.00 21.96      N
ATOM   270 CA  GLN A 237   -16.373 16.687 50.431 1.00 22.24      C
ATOM   272 CB  GLN A 237   -16.683 16.470 51.923 1.00 22.91      C
ATOM   275 CG  GLN A 237   -16.664 14.997 52.379 1.00 26.71      C
ATOM   278 CD  GLN A 237   -16.470 14.773 53.913 1.00 30.99      C
ATOM   279 OE1 GLN A 237   -16.674 13.640 54.381 1.00 33.33      O
ATOM   280 NE2 GLN A 237   -16.075 15.829 54.678 1.00 31.61      N
ATOM   283 C   GLN A 237   -16.746 18.097 50.095 1.00 21.57      C
ATOM   284 O   GLN A 237   -17.875 18.381 49.779 1.00 21.64      O
ATOM   285 N   CYS A 238   -15.803 19.001 50.189 1.00 21.37      N
ATOM   287 CA  CYS A 238   -16.106 20.382 49.933 1.00 21.90      C
ATOM   289 CB  CYS A 238   -14.933 21.268 50.319 1.00 22.20      C
ATOM   292 SG  CYS A 238   -15.030 21.765 52.027 1.00 21.86      S
ATOM   293 C   CYS A 238   -16.385 20.508 48.468 1.00 22.29      C
ATOM   294 O   CYS A 238   -17.288 21.221 48.050 1.00 21.90      O
ATOM   295 N   ASN A 239   -15.590 19.792 47.691 1.00 22.98      N
ATOM   297 CA  ASN A 239   -15.691 19.869 46.261 1.00 23.73      C
ATOM   299 CB  ASN A 239   -14.463 19.232 45.582 1.00 24.05      C
ATOM   302 CG  ASN A 239   -14.287 19.708 44.128 1.00 25.70      C
ATOM   303 OD1 ASN A 239   -14.637 18.983 43.188 1.00 27.70      O
ATOM   304 ND2 ASN A 239   -13.789 20.943 43.945 1.00 27.04      N
ATOM   307 C   ASN A 239   -17.009 19.263 45.802 1.00 23.69      C
ATOM   308 O   ASN A 239   -17.703 19.853 44.986 1.00 24.39      O
ATOM   309 N   LYS A 240   -17.364 18.107 46.354 1.00 23.59      N
ATOM   311 CA  LYS A 240   -18.609 17.421 46.030 1.00 23.52      C
ATOM   313 CB  LYS A 240   -18.719 16.127 46.843 1.00 23.44      C
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| ATOM | 316 | CG | LYS A 240 | -19.950 | 15.300 | 46.541 | 1.00 | 24.05 | C |
|------|-----|-----|-----------|---------|--------|--------|------|-------|---|
| ATOM | 319 | CD | LYS A 240 | -19.746 | 13.876 | 46.958 | 1.00 | 25.71 | C |
| ATOM | 322 | CE | LYS A 240 | -20.932 | 13.010 | 46.622 | 1.00 | 26.90 | C |
| ATOM | 325 | NZ | LYS A 240 | -21.540 | 12.446 | 47.847 | 1.00 | 27.75 | N |
| ATOM | 329 | C | LYS A 240 | -19.799 | 18.308 | 46.338 | 1.00 | 23.67 | C |
| ATOM | 330 | O | LYS A 240 | -20.731 | 18.394 | 45.562 | 1.00 | 23.66 | O |
| ATOM | 331 | N | ARG A 241 | -19.740 | 18.962 | 47.490 | 1.00 | 24.06 | N |
| ATOM | 333 | CA | ARG A 241 | -20.796 | 19.842 | 47.995 | 1.00 | 24.47 | C |
| ATOM | 335 | CB | ARG A 241 | -20.450 | 20.278 | 49.431 | 1.00 | 24.96 | C |
| ATOM | 338 | CG | ARG A 241 | -21.613 | 20.328 | 50.388 | 1.00 | 25.97 | C |
| ATOM | 341 | CD | ARG A 241 | -21.267 | 20.916 | 51.747 | 1.00 | 27.73 | C |
| ATOM | 344 | NE | ARG A 241 | -22.165 | 22.017 | 52.101 | 1.00 | 28.90 | N |
| ATOM | 346 | CZ | ARG A 241 | -23.486 | 21.893 | 52.299 | 1.00 | 30.39 | C |
| ATOM | 347 | NH1 | ARG A 241 | -24.108 | 20.712 | 52.181 | 1.00 | 29.33 | N |
| ATOM | 350 | NH2 | ARG A 241 | -24.200 | 22.966 | 52.626 | 1.00 | 32.01 | N |
| ATOM | 353 | C | ARG A 241 | -20.977 | 21.097 | 47.158 | 1.00 | 24.33 | C |
| ATOM | 354 | O | ARG A 241 | -22.088 | 21.443 | 46.784 | 1.00 | 23.85 | O |
| ATOM | 355 | N | SER A 242 | -19.870 | 21.774 | 46.881 | 1.00 | 24.71 | N |
| ATOM | 357 | CA | SER A 242 | -19.893 | 23.054 | 46.200 | 1.00 | 25.36 | C |
| ATOM | 359 | CB | SER A 242 | -18.654 | 23.864 | 46.556 | 1.00 | 25.33 | C |
| ATOM | 362 | OG | SER A 242 | -18.673 | 24.276 | 47.912 | 1.00 | 26.26 | O |
| ATOM | 364 | C | SER A 242 | -19.996 | 22.949 | 44.688 | 1.00 | 26.01 | C |
| ATOM | 365 | O | SER A 242 | -20.468 | 23.892 | 44.059 | 1.00 | 26.36 | O |
| ATOM | 366 | N | PHE A 243 | -19.577 | 21.818 | 44.109 | 1.00 | 26.84 | N |
| ATOM | 368 | CA | PHE A 243 | -19.363 | 21.702 | 42.654 | 1.00 | 27.40 | C |
| ATOM | 370 | CB | PHE A 243 | -17.893 | 21.962 | 42.281 | 1.00 | 27.57 | C |
| ATOM | 373 | CG | PHE A 243 | -17.476 | 23.401 | 42.388 | 1.00 | 28.48 | C |
| ATOM | 374 | CD1 | PHE A 243 | -16.406 | 23.768 | 43.192 | 1.00 | 30.26 | C |
| ATOM | 376 | CE1 | PHE A 243 | -16.017 | 25.108 | 43.293 | 1.00 | 31.11 | C |
| ATOM | 378 | CZ | PHE A 243 | -16.693 | 26.079 | 42.573 | 1.00 | 32.32 | C |
| ATOM | 380 | CE2 | PHE A 243 | -17.761 | 25.717 | 41.751 | 1.00 | 30.72 | C |
| ATOM | 382 | CD2 | PHE A 243 | -18.138 | 24.386 | 41.669 | 1.00 | 30.00 | C |
| ATOM | 384 | C | PHE A 243 | -19.744 | 20.350 | 42.078 | 1.00 | 27.70 | C |
| ATOM | 385 | O | PHE A 243 | -19.065 | 19.865 | 41.173 | 1.00 | 28.04 | O |
| ATOM | 386 | N | SER A 244 | -20.810 | 19.740 | 42.593 | 1.00 | 27.94 | N |
| ATOM | 388 | CA | SER A 244 | -21.388 | 18.561 | 41.956 | 1.00 | 27.89 | C |
| ATOM | 390 | CB | SER A 244 | -22.038 | 17.617 | 42.969 | 1.00 | 27.93 | C |
| ATOM | 393 | OG | SER A 244 | -21.132 | 16.641 | 43.439 | 1.00 | 27.71 | O |
| ATOM | 395 | C | SER A 244 | -22.440 | 19.069 | 41.004 | 1.00 | 28.11 | C |
| ATOM | 396 | O | SER A 244 | -22.398 | 18.799 | 39.810 | 1.00 | 28.08 | O |
| ATOM | 397 | N | ASP A 245 | -23.390 | 19.814 | 41.554 | 1.00 | 28.48 | N |
| ATOM | 399 | CA | ASP A 245 | -24.489 | 20.374 | 40.772 | 1.00 | 28.58 | C |
| ATOM | 401 | CB | ASP A 245 | -25.670 | 20.703 | 41.695 | 1.00 | 28.69 | C |
| ATOM | 404 | CG | ASP A 245 | -26.367 | 19.446 | 42.218 | 1.00 | 29.20 | C |
| ATOM | 405 | OD1 | ASP A 245 | -27.256 | 18.917 | 41.510 | 1.00 | 29.63 | O |
| ATOM | 406 | OD2 | ASP A 245 | -26.089 | 18.909 | 43.312 | 1.00 | 29.52 | O |
| ATOM | 407 | C | ASP A 245 | -24.038 | 21.605 | 39.973 | 1.00 | 28.43 | C |
| ATOM | 408 | O | ASP A 245 | -22.985 | 22.187 | 40.235 | 1.00 | 28.14 | O |

| ATOM | 409 | N | GLN A 246 | -24.833 | 21.973 | 38.976 | 1.00 | 28.73 | N |
| ATOM | 411 | CA | GLN A 246 | -24.511 | 23.105 | 38.107 | 1.00 | 28.73 | C |
| ATOM | 413 | CB | GLN A 246 | -25.515 | 23.249 | 36.951 | 1.00 | 28.69 | C |
| ATOM | 416 | CG | GLN A 246 | -25.610 | 22.033 | 36.023 | 1.00 | 28.33 | C |
| ATOM | 419 | CD | GLN A 246 | -24.579 | 22.068 | 34.924 | 1.00 | 27.89 | C |
| ATOM | 420 | OE1 | GLN A 246 | -24.870 | 22.489 | 33.813 | 1.00 | 28.50 | O |
| ATOM | 421 | NE2 | GLN A 246 | -23.371 | 21.640 | 35.231 | 1.00 | 27.73 | N |
| ATOM | 424 | C | GLN A 246 | -24.553 | 24.338 | 38.970 | 1.00 | 28.78 | C |
| ATOM | 425 | O | GLN A 246 | -25.427 | 24.478 | 39.811 | 1.00 | 28.84 | O |
| ATOM | 426 | N | PRO A 247 | -23.599 | 25.231 | 38.798 | 1.00 | 29.14 | N |
| ATOM | 427 | CA | PRO A 247 | -23.559 | 26.416 | 39.647 | 1.00 | 29.46 | C |
| ATOM | 429 | CB | PRO A 247 | -22.168 | 27.006 | 39.357 | 1.00 | 29.77 | C |
| ATOM | 432 | CG | PRO A 247 | -21.788 | 26.494 | 37.996 | 1.00 | 29.30 | C |
| ATOM | 435 | CD | PRO A 247 | -22.499 | 25.198 | 37.818 | 1.00 | 29.08 | C |
| ATOM | 438 | C | PRO A 247 | -24.706 | 27.351 | 39.273 | 1.00 | 29.76 | C |
| ATOM | 439 | O | PRO A 247 | -25.155 | 27.321 | 38.121 | 1.00 | 30.08 | O |
| ATOM | 440 | N | LYS A 248 | -25.215 | 28.119 | 40.234 | 1.00 | 30.00 | N |
| ATOM | 442 | CA | LYS A 248 | -26.221 | 29.139 | 39.937 | 1.00 | 30.26 | C |
| ATOM | 444 | CB | LYS A 248 | -27.101 | 29.417 | 41.162 | 1.00 | 30.54 | C |
| ATOM | 447 | CG | LYS A 248 | -27.941 | 28.210 | 41.639 | 1.00 | 31.56 | C |
| ATOM | 450 | CD | LYS A 248 | -29.123 | 28.610 | 42.571 | 1.00 | 32.74 | C |
| ATOM | 453 | CE | LYS A 248 | -30.244 | 27.556 | 42.530 | 1.00 | 33.52 | C |
| ATOM | 456 | NZ | LYS A 248 | -31.375 | 27.849 | 43.451 | 1.00 | 33.69 | N |
| ATOM | 460 | C | LYS A 248 | -25.450 | 30.386 | 39.495 | 1.00 | 30.08 | C |
| ATOM | 461 | O | LYS A 248 | -24.799 | 31.051 | 40.310 | 1.00 | 30.32 | O |
| ATOM | 462 | N | VAL A 249 | -25.448 | 30.660 | 38.193 | 1.00 | 29.61 | N |
| ATOM | 464 | CA | VAL A 249 | -24.593 | 31.712 | 37.651 | 1.00 | 29.25 | C |
| ATOM | 466 | CB | VAL A 249 | -23.202 | 31.196 | 37.179 | 1.00 | 29.50 | C |
| ATOM | 468 | CG1 | VAL A 249 | -22.100 | 32.141 | 37.639 | 1.00 | 30.10 | C |
| ATOM | 472 | CG2 | VAL A 249 | -22.892 | 29.825 | 37.697 | 1.00 | 29.90 | C |
| ATOM | 476 | C | VAL A 249 | -25.223 | 32.380 | 36.464 | 1.00 | 28.77 | C |
| ATOM | 477 | O | VAL A 249 | -25.831 | 31.723 | 35.622 | 1.00 | 29.22 | O |
| ATOM | 478 | N | THR A 250 | -25.075 | 33.699 | 36.407 | 1.00 | 28.20 | N |
| ATOM | 480 | CA | THR A 250 | -25.410 | 34.463 | 35.222 | 1.00 | 27.53 | C |
| ATOM | 482 | CB | THR A 250 | -24.740 | 35.840 | 35.274 | 1.00 | 27.36 | C |
| ATOM | 484 | OG1 | THR A 250 | -25.260 | 36.595 | 36.371 | 1.00 | 26.90 | O |
| ATOM | 486 | CG2 | THR A 250 | -25.106 | 36.681 | 34.074 | 1.00 | 27.81 | C |
| ATOM | 490 | C | THR A 250 | -24.870 | 33.663 | 34.057 | 1.00 | 27.36 | C |
| ATOM | 491 | O | THR A 250 | -23.683 | 33.365 | 34.035 | 1.00 | 26.84 | O |
| ATOM | 492 | N | PRO A 251 | -25.737 | 33.270 | 33.121 | 1.00 | 27.46 | N |
| ATOM | 493 | CA | PRO A 251 | -25.312 | 32.536 | 31.920 | 1.00 | 27.22 | C |
| ATOM | 495 | CB | PRO A 251 | -26.579 | 32.520 | 31.054 | 1.00 | 27.39 | C |
| ATOM | 498 | CG | PRO A 251 | -27.719 | 32.783 | 31.974 | 1.00 | 27.38 | C |
| ATOM | 501 | CD | PRO A 251 | -27.194 | 33.507 | 33.148 | 1.00 | 27.33 | C |
| ATOM | 504 | C | PRO A 251 | -24.175 | 33.238 | 31.155 | 1.00 | 27.16 | C |
| ATOM | 505 | O | PRO A 251 | -24.321 | 34.425 | 30.816 | 1.00 | 26.96 | O |
| ATOM | 506 | N | TRP A 252 | -23.076 | 32.518 | 30.892 | 1.00 | 27.01 | N |
| ATOM | 508 | CA | TRP A 252 | -21.942 | 33.047 | 30.113 | 1.00 | 26.96 | C |

| ATOM | 510 | CB | TRP A 252 | -20.742 | 32.086 | 30.209 | 1.00 | 27.01 | C |
|------|-----|------|-----------|---------|--------|--------|------|-------|---|
| ATOM | 513 | CG | TRP A 252 | -19.466 | 32.589 | 29.544 | 1.00 | 27.07 | C |
| ATOM | 514 | CD1 | TRP A 252 | -19.056 | 32.336 | 28.274 | 1.00 | 27.45 | C |
| ATOM | 516 | NE1 | TRP A 252 | -17.856 | 32.956 | 28.023 | 1.00 | 27.64 | N |
| ATOM | 518 | CE2 | TRP A 252 | -17.464 | 33.628 | 29.147 | 1.00 | 27.28 | C |
| ATOM | 519 | CD2 | TRP A 252 | -18.451 | 33.412 | 30.128 | 1.00 | 27.12 | C |
| ATOM | 520 | CE3 | TRP A 252 | -18.274 | 33.994 | 31.386 | 1.00 | 26.88 | C |
| ATOM | 522 | CZ3 | TRP A 252 | -17.149 | 34.752 | 31.625 | 1.00 | 26.34 | C |
| ATOM | 524 | CH2 | TRP A 252 | -16.190 | 34.951 | 30.630 | 1.00 | 27.03 | C |
| ATOM | 526 | CZ2 | TRP A 252 | -16.328 | 34.397 | 29.383 | 1.00 | 27.06 | C |
| ATOM | 528 | C | TRP A 252 | -22.364 | 33.291 | 28.641 | 1.00 | 27.00 | C |
| ATOM | 529 | O | TRP A 252 | -22.650 | 32.340 | 27.914 | 1.00 | 26.88 | O |
| ATOM | 530 | N | PRO A 253 | -22.413 | 34.552 | 28.207 | 1.00 | 27.02 | N |
| ATOM | 531 | CA | PRO A 253 | -23.075 | 34.923 | 26.944 | 1.00 | 27.13 | C |
| ATOM | 533 | CB | PRO A 253 | -22.633 | 36.369 | 26.740 | 1.00 | 26.99 | C |
| ATOM | 536 | CG | PRO A 253 | -22.425 | 36.862 | 28.122 | 1.00 | 27.20 | C |
| ATOM | 539 | CD | PRO A 253 | -21.846 | 35.730 | 28.887 | 1.00 | 26.96 | C |
| ATOM | 542 | C | PRO A 253 | -22.783 | 34.037 | 25.707 | 1.00 | 27.29 | C |
| ATOM | 543 | O | PRO A 253 | -21.842 | 34.201 | 24.927 | 1.00 | 27.33 | O |
| ATOM | 544 | N | ALA A 261 | -21.033 | 46.340 | 25.423 | 1.00 | 34.78 | N |
| ATOM | 546 | CA | ALA A 261 | -21.278 | 46.695 | 26.824 | 1.00 | 34.81 | C |
| ATOM | 548 | CB | ALA A 261 | -21.883 | 48.098 | 26.916 | 1.00 | 34.71 | C |
| ATOM | 552 | C | ALA A 261 | -22.192 | 45.678 | 27.518 | 1.00 | 34.78 | C |
| ATOM | 553 | O | ALA A 261 | -22.029 | 45.385 | 28.711 | 1.00 | 34.60 | O |
| ATOM | 554 | N | ASP A 262 | -23.157 | 45.159 | 26.758 | 1.00 | 34.77 | N |
| ATOM | 556 | CA | ASP A 262 | -24.179 | 44.243 | 27.275 | 1.00 | 34.61 | C |
| ATOM | 558 | CB | ASP A 262 | -24.954 | 43.597 | 26.105 | 1.00 | 34.57 | C |
| ATOM | 561 | CG | ASP A 262 | -25.879 | 44.587 | 25.373 | 1.00 | 34.47 | C |
| ATOM | 562 | OD1 | ASP A 262 | -25.775 | 45.805 | 25.617 | 1.00 | 34.39 | O |
| ATOM | 563 | OD2 | ASP A 262 | -26.744 | 44.240 | 24.536 | 1.00 | 33.23 | O |
| ATOM | 564 | C | ASP A 262 | -23.557 | 43.156 | 28.157 | 1.00 | 34.44 | C |
| ATOM | 565 | O | ASP A 262 | -23.923 | 43.001 | 29.321 | 1.00 | 34.35 | O |
| ATOM | 566 | N | ALA A 263 | -22.580 | 42.450 | 27.588 | 1.00 | 34.23 | N |
| ATOM | 568 | CA | ALA A 263 | -21.996 | 41.235 | 28.170 | 1.00 | 33.99 | C |
| ATOM | 570 | CB | ALA A 263 | -21.838 | 40.178 | 27.079 | 1.00 | 34.09 | C |
| ATOM | 574 | C | ALA A 263 | -20.650 | 41.464 | 28.862 | 1.00 | 33.70 | C |
| ATOM | 575 | O | ALA A 263 | -19.984 | 40.498 | 29.269 | 1.00 | 33.64 | O |
| ATOM | 576 | N | ARG A 264 | -20.243 | 42.737 | 28.941 | 1.00 | 33.29 | N |
| ATOM | 578 | CA | ARG A 264 | -19.097 | 43.178 | 29.743 | 1.00 | 32.67 | C |
| ATOM | 580 | CB | ARG A 264 | -18.804 | 44.674 | 29.510 | 1.00 | 32.96 | C |
| ATOM | 583 | CG | ARG A 264 | -17.716 | 44.953 | 28.482 | 1.00 | 34.81 | C |
| ATOM | 586 | CD | ARG A 264 | -16.292 | 44.666 | 29.000 | 1.00 | 37.32 | C |
| ATOM | 589 | NE | ARG A 264 | -15.342 | 44.361 | 27.918 | 1.00 | 39.57 | N |
| ATOM | 591 | CZ | ARG A 264 | -14.061 | 44.011 | 28.100 | 1.00 | 40.37 | C |
| ATOM | 592 | NH1 | ARG A 264 | -13.558 | 43.920 | 29.324 | 1.00 | 41.07 | N |
| ATOM | 595 | NH2 | ARG A 264 | -13.278 | 43.754 | 27.055 | 1.00 | 40.24 | N |
| ATOM | 598 | C | ARG A 264 | -19.434 | 42.929 | 31.210 | 1.00 | 31.60 | C |
| ATOM | 599 | O | ARG A 264 | -18.705 | 42.225 | 31.911 | 1.00 | 31.31 | O |

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ATOM  600 N   GLN A 265  -20.561 43.501 31.648 1.00 30.27        N
ATOM  602 CA  GLN A 265  -21.079 43.287 32.999 1.00 29.10        C
ATOM  604 CB  GLN A 265  -22.249 44.239 33.319 1.00 28.98        C
ATOM  607 CG  GLN A 265  -21.818 45.574 33.976 1.00 29.73        C
ATOM  610 CD  GLN A 265  -22.270 46.818 33.191 1.00 30.32        C
ATOM  611 OE1 GLN A 265  -22.950 47.694 33.738 1.00 30.04        O
ATOM  612 NE2 GLN A 265  -21.885 46.895 31.917 1.00 30.05        N
ATOM  615 C   GLN A 265  -21.499 41.839 33.219 1.00 27.75        C
ATOM  616 O   GLN A 265  -21.334 41.328 34.314 1.00 27.82        O
ATOM  617 N   GLN A 266  -22.022 41.181 32.187 1.00 26.21        N
ATOM  619 CA  GLN A 266  -22.527 39.808 32.321 1.00 24.92        C
ATOM  621 CB  GLN A 266  -23.344 39.381 31.094 1.00 24.75        C
ATOM  624 CG  GLN A 266  -24.787 38.953 31.377 1.00 24.16        C
ATOM  627 CD  GLN A 266  -25.723 39.314 30.227 1.00 23.84        C
ATOM  628 OE1 GLN A 266  -26.764 39.936 30.434 1.00 23.51        O
ATOM  629 NE2 GLN A 266  -25.338 38.943 29.011 1.00 23.56        N
ATOM  632 C   GLN A 266  -21.408 38.795 32.554 1.00 24.04        C
ATOM  633 O   GLN A 266  -21.592 37.849 33.317 1.00 23.90        O
ATOM  634 N   ARG A 267  -20.260 38.978 31.902 1.00 22.85        N
ATOM  636 CA  ARG A 267  -19.143 38.031 32.058 1.00 21.84        C
ATOM  638 CB  ARG A 267  -18.154 38.137 30.883 1.00 21.71        C
ATOM  641 CG  ARG A 267  -18.580 37.268 29.730 1.00 22.50        C
ATOM  644 CD  ARG A 267  -17.832 37.435 28.429 1.00 23.45        C
ATOM  647 NE  ARG A 267  -18.674 36.954 27.323 1.00 24.84        N
ATOM  649 CZ  ARG A 267  -18.259 36.692 26.082 1.00 24.64        C
ATOM  650 NH1 ARG A 267  -16.991 36.857 25.733 1.00 25.31        N
ATOM  653 NH2 ARG A 267  -19.126 36.262 25.180 1.00 23.40        N
ATOM  656 C   ARG A 267  -18.457 38.232 33.414 1.00 20.83        C
ATOM  657 O   ARG A 267  -18.025 37.274 34.054 1.00 20.47        O
ATOM  658 N   PHE A 268  -18.387 39.496 33.831 1.00 19.89        N
ATOM  660 CA  PHE A 268  -17.848 39.907 35.117 1.00 19.08        C
ATOM  662 CB  PHE A 268  -17.861 41.432 35.225 1.00 18.83        C
ATOM  665 CG  PHE A 268  -17.385 41.950 36.546 1.00 17.99        C
ATOM  666 CD1 PHE A 268  -16.099 41.692 36.977 1.00 16.96        C
ATOM  668 CE1 PHE A 268  -15.656 42.174 38.208 1.00 17.27        C
ATOM  670 CZ  PHE A 268  -16.507 42.916 39.016 1.00 16.82        C
ATOM  672 CE2 PHE A 268  -17.794 43.173 38.594 1.00 16.87        C
ATOM  674 CD2 PHE A 268  -18.226 42.700 37.361 1.00 17.26        C
ATOM  676 C   PHE A 268  -18.686 39.310 36.236 1.00 18.75        C
ATOM  677 O   PHE A 268  -18.159 38.688 37.151 1.00 18.48        O
ATOM  678 N   ALA A 269  -19.995 39.514 36.140 1.00 18.26        N
ATOM  680 CA  ALA A 269  -20.941 39.054 37.143 1.00 17.83        C
ATOM  682 CB  ALA A 269  -22.374 39.366 36.714 1.00 17.76        C
ATOM  686 C   ALA A 269  -20.761 37.573 37.317 1.00 17.28        C
ATOM  687 O   ALA A 269  -20.662 37.099 38.446 1.00 17.23        O
ATOM  688 N   HIS A 270  -20.725 36.876 36.178 1.00 16.61        N
ATOM  690 CA  HIS A 270  -20.439 35.456 36.091 1.00 16.26        C
ATOM  692 CB  HIS A 270  -20.251 35.037 34.611 1.00 16.45        C
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ATOM   695 CG  HIS A 270   -20.072 33.561 34.411 1.00 17.07      C
ATOM   696 ND1 HIS A 270   -21.112 32.667 34.498 1.00 17.46      N
ATOM   698 CE1 HIS A 270   -20.659 31.441 34.305 1.00 18.13      C
ATOM   700 NE2 HIS A 270   -19.363 31.508 34.081 1.00 17.84      N
ATOM   702 CD2 HIS A 270   -18.968 32.820 34.155 1.00 18.32      C
ATOM   704 C   HIS A 270   -19.196 35.150 36.913 1.00 16.12      C
ATOM   705 O   HIS A 270   -19.222 34.259 37.760 1.00 16.15      O
ATOM   706 N   PHE A 271   -18.115 35.907 36.692 1.00 15.98      N
ATOM   708 CA  PHE A 271   -16.840 35.675 37.409 1.00 15.49      C
ATOM   710 CB  PHE A 271   -15.728 36.586 36.903 1.00 15.33      C
ATOM   713 CG  PHE A 271   -14.844 35.923 35.908 1.00 17.14      C
ATOM   714 CD1 PHE A 271   -15.387 35.182 34.871 1.00 18.69      C
ATOM   716 CE1 PHE A 271   -14.575 34.551 33.944 1.00 19.99      C
ATOM   718 CZ  PHE A 271   -13.211 34.646 34.048 1.00 19.96      C
ATOM   720 CE2 PHE A 271   -12.655 35.384 35.069 1.00 19.86      C
ATOM   722 CD2 PHE A 271   -13.473 36.015 36.005 1.00 19.16      C
ATOM   724 C   PHE A 271   -17.003 35.845 38.882 1.00 14.62      C
ATOM   725 O   PHE A 271   -16.527 35.052 39.664 1.00 14.92      O
ATOM   726 N   THR A 272   -17.732 36.882 39.229 1.00 14.01      N
ATOM   728 CA  THR A 272   -18.029 37.264 40.588 1.00 13.51      C
ATOM   730 CB  THR A 272   -18.697 38.673 40.511 1.00 13.40      C
ATOM   732 OG1 THR A 272   -17.981 39.587 41.346 1.00 13.64      O
ATOM   734 CG2 THR A 272   -20.135 38.717 40.981 1.00 12.87      C
ATOM   738 C   THR A 272   -18.860 36.204 41.357 1.00 13.68      C
ATOM   739 O   THR A 272   -18.763 36.074 42.579 1.00 12.27      O
ATOM   740 N   GLU A 273   -19.649 35.430 40.620 1.00 14.33      N
ATOM   742 CA  GLU A 273   -20.560 34.461 41.208 1.00 14.96      C
ATOM   744 CB  GLU A 273   -21.823 34.347 40.363 1.00 15.07      C
ATOM   747 CG  GLU A 273   -22.783 35.506 40.595 1.00 15.71      C
ATOM   750 CD  GLU A 273   -23.552 35.917 39.347 1.00 18.47      C
ATOM   751 OE1 GLU A 273   -23.420 35.236 38.305 1.00 19.72      O
ATOM   752 OE2 GLU A 273   -24.295 36.930 39.403 1.00 19.58      O
ATOM   753 C   GLU A 273   -19.881 33.115 41.402 1.00 15.28      C
ATOM   754 O   GLU A 273   -20.162 32.411 42.365 1.00 15.66      O
ATOM   755 N   LEU A 274   -18.983 32.768 40.489 1.00 15.69      N
ATOM   757 CA  LEU A 274   -17.993 31.720 40.735 1.00 15.82      C
ATOM   759 CB  LEU A 274   -17.112 31.523 39.513 1.00 16.11      C
ATOM   762 CG  LEU A 274   -17.893 30.959 38.341 1.00 18.50      C
ATOM   764 CD1 LEU A 274   -17.141 31.090 37.003 1.00 19.08      C
ATOM   768 CD2 LEU A 274   -18.223 29.519 38.650 1.00 21.07      C
ATOM   772 C   LEU A 274   -17.091 32.061 41.908 1.00 15.27      C
ATOM   773 O   LEU A 274   -16.855 31.224 42.747 1.00 15.73      O
ATOM   774 N   ALA A 275   -16.573 33.284 41.979 1.00 14.95      N
ATOM   776 CA  ALA A 275   -15.706 33.668 43.100 1.00 14.65      C
ATOM   778 CB  ALA A 275   -15.273 35.105 42.943 1.00 14.60      C
ATOM   782 C   ALA A 275   -16.386 33.425 44.467 1.00 14.65      C
ATOM   783 O   ALA A 275   -15.787 32.880 45.379 1.00 14.90      O
ATOM   784 N   ILE A 276   -17.665 33.781 44.557 1.00 14.61      N
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ATOM   786  CA  ILE A 276   -18.473 33.595 45.739 1.00 14.40        C
ATOM   788  CB  ILE A 276   -19.853 34.224 45.515 1.00 14.07        C
ATOM   790  CG1 ILE A 276   -19.752 35.730 45.719 1.00 12.92        C
ATOM   793  CD1 ILE A 276   -20.838 36.515 45.086 1.00 10.99        C
ATOM   797  CG2 ILE A 276   -20.885 33.637 46.457 1.00 14.11        C
ATOM   801  C   ILE A 276   -18.635 32.128 46.065 1.00 15.52        C
ATOM   802  O   ILE A 276   -18.594 31.743 47.217 1.00 16.10        O
ATOM   803  N   ILE A 277   -18.884 31.289 45.074 1.00 16.37        N
ATOM   805  CA  ILE A 277   -19.072 29.884 45.395 1.00 16.51        C
ATOM   807  CB  ILE A 277   -19.605 29.069 44.188 1.00 16.40        C
ATOM   809  CG1 ILE A 277   -21.009 29.557 43.805 1.00 15.48        C
ATOM   812  CD1 ILE A 277   -21.503 29.085 42.436 1.00 14.84        C
ATOM   816  CG2 ILE A 277   -19.615 27.543 44.502 1.00 16.15        C
ATOM   820  C   ILE A 277   -17.741 29.352 45.943 1.00 17.07        C
ATOM   821  O   ILE A 277   -17.775 28.554 46.868 1.00 17.29        O
ATOM   822  N   SER A 278   -16.588 29.809 45.424 1.00 17.53        N
ATOM   824  CA  SER A 278   -15.276 29.328 45.935 1.00 18.29        C
ATOM   826  CB  SER A 278   -14.080 29.758 45.095 1.00 18.13        C
ATOM   829  OG  SER A 278   -14.033 29.048 43.876 1.00 19.28        O
ATOM   831  C   SER A 278   -15.047 29.819 47.331 1.00 18.69        C
ATOM   832  O   SER A 278   -14.555 29.088 48.162 1.00 19.53        O
ATOM   833  N   VAL A 279   -15.425 31.061 47.599 1.00 18.86        N
ATOM   835  CA  VAL A 279   -15.327 31.582 48.943 1.00 18.40        C
ATOM   837  CB  VAL A 279   -15.826 33.007 49.018 1.00 18.28        C
ATOM   839  CG1 VAL A 279   -15.875 33.460 50.457 1.00 18.92        C
ATOM   843  CG2 VAL A 279   -14.915 33.940 48.179 1.00 18.55        C
ATOM   847  C   VAL A 279   -16.101 30.691 49.899 1.00 18.11        C
ATOM   848  O   VAL A 279   -15.637 30.422 50.989 1.00 18.34        O
ATOM   849  N   GLN A 280   -17.260 30.206 49.488 1.00 18.45        N
ATOM   851  CA  GLN A 280   -18.096 29.360 50.355 1.00 19.16        C
ATOM   853  CB  GLN A 280   -19.481 29.137 49.735 1.00 19.21        C
ATOM   856  CG  GLN A 280   -20.395 28.181 50.530 1.00 19.68        C
ATOM   859  CD  GLN A 280   -21.736 27.882 49.845 1.00 19.43        C
ATOM   860  OE1 GLN A 280   -21.832 27.889 48.617 1.00 20.07        O
ATOM   861  NE2 GLN A 280   -22.768 27.626 50.647 1.00 18.11        N
ATOM   864  C   GLN A 280   -17.412 28.008 50.613 1.00 19.69        C
ATOM   865  O   GLN A 280   -17.382 27.501 51.752 1.00 19.08        O
ATOM   866  N   GLU A 281   -16.850 27.451 49.540 1.00 20.23        N
ATOM   868  CA  GLU A 281   -16.128 26.191 49.597 1.00 20.69        C
ATOM   870  CB  GLU A 281   -15.652 25.802 48.195 1.00 21.17        C
ATOM   873  CG  GLU A 281   -15.182 24.352 48.059 1.00 23.43        C
ATOM   876  CD  GLU A 281   -14.489 24.077 46.741 1.00 25.24        C
ATOM   877  OE1 GLU A 281   -14.400 25.003 45.920 1.00 27.50        O
ATOM   878  OE2 GLU A 281   -14.043 22.939 46.515 1.00 26.24        O
ATOM   879  C   GLU A 281   -14.947 26.286 50.569 1.00 20.27        C
ATOM   880  O   GLU A 281   -14.722 25.383 51.381 1.00 19.17        O
ATOM   881  N   ILE A 282   -14.227 27.401 50.493 1.00 20.70        N
ATOM   883  CA  ILE A 282   -13.020 27.618 51.279 1.00 21.12        C
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ATOM   885 CB  ILE A 282   -12.241 28.824 50.743 1.00 21.29        C
ATOM   887 CG1 ILE A 282   -11.674 28.506 49.374 1.00 22.06        C
ATOM   890 CD1 ILE A 282   -11.200 29.748 48.677 1.00 24.25        C
ATOM   894 CG2 ILE A 282   -11.072 29.220 51.666 1.00 21.70        C
ATOM   898 C   ILE A 282   -13.399 27.807 52.735 1.00 21.18        C
ATOM   899 O   ILE A 282   -12.773 27.260 53.634 1.00 20.38        O
ATOM   900 N   VAL A 283   -14.455 28.552 52.977 1.00 21.82        N
ATOM   902 CA  VAL A 283   -14.887 28.744 54.355 1.00 22.56        C
ATOM   904 CB  VAL A 283   -16.002 29.835 54.469 1.00 22.43        C
ATOM   906 CG1 VAL A 283   -16.530 29.899 55.863 1.00 22.01        C
ATOM   910 CG2 VAL A 283   -15.454 31.201 54.076 1.00 22.49        C
ATOM   914 C   VAL A 283   -15.313 27.404 54.959 1.00 22.99        C
ATOM   915 O   VAL A 283   -14.946 27.104 56.090 1.00 23.43        O
ATOM   916 N   ASP A 284   -16.055 26.592 54.196 1.00 23.57        N
ATOM   918 CA  ASP A 284   -16.445 25.232 54.627 1.00 23.91        C
ATOM   920 CB  ASP A 284   -17.270 24.496 53.555 1.00 24.56        C
ATOM   923 CG  ASP A 284   -18.701 25.006 53.464 1.00 27.94        C
ATOM   924 OD1 ASP A 284   -19.410 24.651 52.474 1.00 30.69        O
ATOM   925 OD2 ASP A 284   -19.189 25.776 54.342 1.00 31.56        O
ATOM   926 C   ASP A 284   -15.253 24.363 54.962 1.00 22.67        C
ATOM   927 O   ASP A 284   -15.314 23.576 55.875 1.00 22.99        O
ATOM   928 N   PHE A 285   -14.180 24.489 54.208 1.00 21.73        N
ATOM   930 CA  PHE A 285   -12.993 23.686 54.447 1.00 21.06        C
ATOM   932 CB  PHE A 285   -12.137 23.695 53.194 1.00 20.37        C
ATOM   935 CG  PHE A 285   -10.851 23.025 53.351 1.00 18.40        C
ATOM   936 CD1 PHE A 285   -10.762 21.667 53.241 1.00 19.63        C
ATOM   938 CE1 PHE A 285    -9.558 21.030 53.393 1.00 18.18        C
ATOM   940 CZ  PHE A 285    -8.460 21.745 53.668 1.00 17.14        C
ATOM   942 CE2 PHE A 285    -8.544 23.107 53.782 1.00 17.51        C
ATOM   944 CD2 PHE A 285    -9.726 23.737 53.621 1.00 16.48        C
ATOM   946 C   PHE A 285   -12.224 24.199 55.691 1.00 21.65        C
ATOM   947 O   PHE A 285   -11.761 23.414 56.515 1.00 21.74        O
ATOM   948 N   ALA A 286   -12.111 25.519 55.831 1.00 22.24        N
ATOM   950 CA  ALA A 286   -11.398 26.144 56.945 1.00 22.34        C
ATOM   952 CB  ALA A 286   -11.548 27.662 56.873 1.00 22.09        C
ATOM   956 C   ALA A 286   -11.967 25.630 58.255 1.00 22.99        C
ATOM   957 O   ALA A 286   -11.245 25.348 59.214 1.00 22.63        O
ATOM   958 N   LYS A 287   -13.285 25.499 58.258 1.00 23.62        N
ATOM   960 CA  LYS A 287   -14.022 25.133 59.438 1.00 24.58        C
ATOM   962 CB  LYS A 287   -15.534 25.200 59.161 1.00 25.41        C
ATOM   965 CG  LYS A 287   -16.157 26.612 59.304 1.00 27.79        C
ATOM   968 CD  LYS A 287   -17.429 26.774 58.442 1.00 30.45        C
ATOM   971 CE  LYS A 287   -18.692 26.964 59.266 1.00 30.44        C
ATOM   974 NZ  LYS A 287   -19.850 26.614 58.412 1.00 31.17        N
ATOM   978 C   LYS A 287   -13.672 23.750 59.909 1.00 24.06        C
ATOM   979 O   LYS A 287   -13.801 23.472 61.083 1.00 24.69        O
ATOM   980 N   GLN A 288   -13.276 22.887 58.982 1.00 23.67        N
ATOM   982 CA  GLN A 288   -12.971 21.495 59.266 1.00 23.33        C
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ATOM   984  CB  GLN A 288   -13.479 20.618 58.132 1.00 23.55        C
ATOM   987  CG  GLN A 288   -14.961 20.346 58.204 1.00 26.24        C
ATOM   990  CD  GLN A 288   -15.538 19.977 56.851 1.00 29.73        C
ATOM   991  OE1 GLN A 288   -15.784 18.803 56.568 1.00 33.37        O
ATOM   992  NE2 GLN A 288   -15.745 20.979 56.006 1.00 30.98        N
ATOM   995  C   GLN A 288   -11.481 21.247 59.461 1.00 22.42        C
ATOM   996  O   GLN A 288   -11.075 20.112 59.681 1.00 22.22        O
ATOM   997  N   VAL A 289   -10.666 22.291 59.372 1.00 21.47        N
ATOM   999  CA  VAL A 289    -9.236 22.147 59.624 1.00 21.01        C
ATOM  1001  CB  VAL A 289    -8.420 23.258 58.923 1.00 20.55        C
ATOM  1003  CG1 VAL A 289    -6.947 23.229 59.338 1.00 20.04        C
ATOM  1007  CG2 VAL A 289    -8.523 23.112 57.423 1.00 20.55        C
ATOM  1011  C   VAL A 289    -9.005 22.162 61.137 1.00 21.11        C
ATOM  1012  O   VAL A 289    -9.284 23.151 61.788 1.00 20.89        O
ATOM  1013  N   PRO A 290    -8.511 21.078 61.711 1.00 21.55        N
ATOM  1014  CA  PRO A 290    -8.262 21.048 63.155 1.00 21.97        C
ATOM  1016  CB  PRO A 290    -7.576 19.691 63.374 1.00 21.92        C
ATOM  1019  CG  PRO A 290    -8.110 18.849 62.272 1.00 22.54        C
ATOM  1022  CD  PRO A 290    -8.177 19.795 61.074 1.00 22.12        C
ATOM  1025  C   PRO A 290    -7.382 22.201 63.648 1.00 22.60        C
ATOM  1026  O   PRO A 290    -6.302 22.483 63.085 1.00 21.36        O
ATOM  1027  N   GLY A 291    -7.862 22.840 64.728 1.00 23.56        N
ATOM  1029  CA  GLY A 291    -7.273 24.061 65.253 1.00 24.05        C
ATOM  1032  C   GLY A 291    -8.084 25.312 64.881 1.00 24.85        C
ATOM  1033  O   GLY A 291    -8.128 26.286 65.642 1.00 25.14        O
ATOM  1034  N   PHE A 292    -8.739 25.315 63.724 1.00 25.09        N
ATOM  1036  CA  PHE A 292    -9.328 26.556 63.259 1.00 25.49        C
ATOM  1038  CB  PHE A 292    -9.782 26.476 61.792 1.00 25.34        C
ATOM  1041  CG  PHE A 292   -10.313 27.793 61.247 1.00 24.83        C
ATOM  1042  CD1 PHE A 292    -9.473 28.687 60.606 1.00 24.26        C
ATOM  1044  CE1 PHE A 292    -9.958 29.889 60.111 1.00 24.47        C
ATOM  1046  CZ  PHE A 292   -11.275 30.213 60.262 1.00 24.13        C
ATOM  1048  CE2 PHE A 292   -12.130 29.324 60.890 1.00 24.51        C
ATOM  1050  CD2 PHE A 292   -11.651 28.131 61.382 1.00 24.38        C
ATOM  1052  C   PHE A 292   -10.490 26.935 64.155 1.00 26.26        C
ATOM  1053  O   PHE A 292   -10.486 27.995 64.754 1.00 25.69        O
ATOM  1054  N   LEU A 293   -11.483 26.058 64.251 1.00 27.65        N
ATOM  1056  CA  LEU A 293   -12.710 26.388 64.964 1.00 28.61        C
ATOM  1058  CB  LEU A 293   -13.840 25.376 64.683 1.00 29.02        C
ATOM  1061  CG  LEU A 293   -14.810 25.599 63.488 1.00 31.33        C
ATOM  1063  CD1 LEU A 293   -16.103 24.757 63.649 1.00 32.23        C
ATOM  1067  CD2 LEU A 293   -15.200 27.064 63.259 1.00 32.62        C
ATOM  1071  C   LEU A 293   -12.422 26.513 66.458 1.00 28.53        C
ATOM  1072  O   LEU A 293   -13.307 26.810 67.227 1.00 29.36        O
ATOM  1073  N   GLN A 294   -11.175 26.343 66.857 1.00 28.36        N
ATOM  1075  CA  GLN A 294   -10.793 26.517 68.233 1.00 28.53        C
ATOM  1077  CB  GLN A 294   -10.086 25.229 68.671 1.00 29.69        C
ATOM  1080  CG  GLN A 294   -11.080 23.994 68.980 1.00 30.93        C
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ATOM  1083 CD  GLN A 294   -12.019 23.596 67.821 1.00 31.94      C
ATOM  1084 OE1 GLN A 294   -11.601 23.523 66.654 1.00 33.37      O
ATOM  1085 NE2 GLN A 294   -13.285 23.343 68.153 1.00 32.22      N
ATOM  1088 C   GLN A 294    -9.927 27.765 68.483 1.00 28.31      C
ATOM  1089 O   GLN A 294    -9.371 27.939 69.568 1.00 28.59      O
ATOM  1090 N   LEU A 295    -9.821 28.644 67.479 1.00 27.61      N
ATOM  1092 CA  LEU A 295    -9.274 30.007 67.642 1.00 25.98      C
ATOM  1094 CB  LEU A 295    -8.658 30.501 66.340 1.00 25.70      C
ATOM  1097 CG  LEU A 295    -7.250 30.025 66.006 1.00 25.90      C
ATOM  1099 CD1 LEU A 295    -6.950 30.228 64.483 1.00 25.84      C
ATOM  1103 CD2 LEU A 295    -6.190 30.700 66.899 1.00 25.19      C
ATOM  1107 C   LEU A 295   -10.417 30.935 68.024 1.00 25.16      C
ATOM  1108 O   LEU A 295   -11.575 30.558 67.862 1.00 24.68      O
ATOM  1109 N   GLY A 296   -10.097 32.143 68.505 1.00 24.51      N
ATOM  1111 CA  GLY A 296   -11.111 33.132 68.854 1.00 24.03      C
ATOM  1114 C   GLY A 296   -11.784 33.597 67.590 1.00 24.16      C
ATOM  1115 O   GLY A 296   -11.126 33.708 66.564 1.00 24.80      O
ATOM  1116 N   ARG A 297   -13.080 33.860 67.620 1.00 24.32      N
ATOM  1118 CA  ARG A 297   -13.810 34.213 66.382 1.00 25.00      C
ATOM  1120 CB  ARG A 297   -15.255 34.611 66.698 1.00 25.43      C
ATOM  1123 CG  ARG A 297   -16.188 34.290 65.559 1.00 27.42      C
ATOM  1126 CD  ARG A 297   -17.373 35.210 65.432 1.00 31.34      C
ATOM  1129 NE  ARG A 297   -18.364 34.571 64.557 1.00 35.73      N
ATOM  1131 CZ  ARG A 297   -19.306 35.200 63.859 1.00 37.74      C
ATOM  1132 NH1 ARG A 297   -19.424 36.516 63.913 1.00 38.58      N
ATOM  1135 NH2 ARG A 297   -20.138 34.496 63.102 1.00 38.50      N
ATOM  1138 C   ARG A 297   -13.182 35.312 65.466 1.00 24.72      C
ATOM  1139 O   ARG A 297   -13.282 35.238 64.232 1.00 23.75      O
ATOM  1140 N   GLU A 298   -12.582 36.328 66.090 1.00 24.68      N
ATOM  1142 CA  GLU A 298   -11.933 37.438 65.387 1.00 24.95      C
ATOM  1144 CB  GLU A 298   -11.537 38.549 66.372 1.00 25.42      C
ATOM  1147 CG  GLU A 298   -12.416 39.784 66.315 1.00 28.30      C
ATOM  1150 CD  GLU A 298   -13.846 39.509 66.741 1.00 32.48      C
ATOM  1151 OE1 GLU A 298   -14.656 39.068 65.869 1.00 35.14      O
ATOM  1152 OE2 GLU A 298   -14.156 39.737 67.944 1.00 34.25      O
ATOM  1153 C   GLU A 298   -10.695 36.976 64.615 1.00 24.10      C
ATOM  1154 O   GLU A 298   -10.458 37.418 63.488 1.00 23.76      O
ATOM  1155 N   ASP A 299    -9.902 36.108 65.227 1.00 23.29      N
ATOM  1157 CA  ASP A 299    -8.799 35.478 64.505 1.00 22.93      C
ATOM  1159 CB  ASP A 299    -7.881 34.701 65.449 1.00 22.83      C
ATOM  1162 CG  ASP A 299    -7.095 35.611 66.379 1.00 22.90      C
ATOM  1163 OD1 ASP A 299    -6.927 36.798 66.038 1.00 21.91      O
ATOM  1164 OD2 ASP A 299    -6.622 35.221 67.473 1.00 24.10      O
ATOM  1165 C   ASP A 299    -9.274 34.553 63.392 1.00 22.80      C
ATOM  1166 O   ASP A 299    -8.617 34.464 62.367 1.00 22.18      O
ATOM  1167 N   GLN A 300   -10.404 33.864 63.583 1.00 22.76      N
ATOM  1169 CA  GLN A 300   -10.942 33.027 62.510 1.00 22.87      C
ATOM  1171 CB  GLN A 300   -12.216 32.311 62.924 1.00 22.91      C
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| ATOM | 1174 | CG | GLN A 300 | -11.973 | 31.073 | 63.743 | 1.00 | 23.81 | C |
| ATOM | 1177 | CD | GLN A 300 | -13.227 | 30.542 | 64.412 | 1.00 | 23.65 | C |
| ATOM | 1178 | OE1 | GLN A 300 | -13.146 | 30.027 | 65.521 | 1.00 | 24.04 | O |
| ATOM | 1179 | NE2 | GLN A 300 | -14.378 | 30.679 | 63.757 | 1.00 | 23.05 | N |
| ATOM | 1182 | C | GLN A 300 | -11.261 | 33.863 | 61.293 | 1.00 | 22.97 | C |
| ATOM | 1183 | O | GLN A 300 | -10.993 | 33.443 | 60.164 | 1.00 | 24.45 | O |
| ATOM | 1184 | N | ILE A 301 | -11.854 | 35.030 | 61.534 | 1.00 | 22.34 | N |
| ATOM | 1186 | CA | ILE A 301 | -12.253 | 35.953 | 60.491 | 1.00 | 21.80 | C |
| ATOM | 1188 | CB | ILE A 301 | -13.185 | 37.048 | 61.078 | 1.00 | 21.87 | C |
| ATOM | 1190 | CG1 | ILE A 301 | -14.594 | 36.477 | 61.342 | 1.00 | 22.74 | C |
| ATOM | 1193 | CD1 | ILE A 301 | -15.503 | 37.351 | 62.232 | 1.00 | 22.27 | C |
| ATOM | 1197 | CG2 | ILE A 301 | -13.313 | 38.185 | 60.127 | 1.00 | 21.94 | C |
| ATOM | 1201 | C | ILE A 301 | -11.020 | 36.576 | 59.838 | 1.00 | 21.40 | C |
| ATOM | 1202 | O | ILE A 301 | -10.971 | 36.722 | 58.605 | 1.00 | 21.05 | O |
| ATOM | 1203 | N | ALA A 302 | -10.036 | 36.922 | 60.674 | 1.00 | 20.83 | N |
| ATOM | 1205 | CA | ALA A 302 | -8.830 | 37.605 | 60.233 | 1.00 | 20.46 | C |
| ATOM | 1207 | CB | ALA A 302 | -7.987 | 37.974 | 61.406 | 1.00 | 19.86 | C |
| ATOM | 1211 | C | ALA A 302 | -8.039 | 36.724 | 59.281 | 1.00 | 20.94 | C |
| ATOM | 1212 | O | ALA A 302 | -7.610 | 37.189 | 58.216 | 1.00 | 20.77 | O |
| ATOM | 1213 | N | LEU A 303 | -7.872 | 35.453 | 59.658 | 1.00 | 21.40 | N |
| ATOM | 1215 | CA | LEU A 303 | -7.090 | 34.488 | 58.881 | 1.00 | 21.77 | C |
| ATOM | 1217 | CB | LEU A 303 | -6.801 | 33.228 | 59.684 | 1.00 | 21.23 | C |
| ATOM | 1220 | CG | LEU A 303 | -6.008 | 33.467 | 60.968 | 1.00 | 21.16 | C |
| ATOM | 1222 | CD1 | LEU A 303 | -5.946 | 32.138 | 61.668 | 1.00 | 21.97 | C |
| ATOM | 1226 | CD2 | LEU A 303 | -4.600 | 34.067 | 60.755 | 1.00 | 19.94 | C |
| ATOM | 1230 | C | LEU A 303 | -7.786 | 34.109 | 57.585 | 1.00 | 22.85 | C |
| ATOM | 1231 | O | LEU A 303 | -7.134 | 33.988 | 56.537 | 1.00 | 22.72 | O |
| ATOM | 1232 | N | LEU A 304 | -9.100 | 33.918 | 57.639 | 1.00 | 23.86 | N |
| ATOM | 1234 | CA | LEU A 304 | -9.856 | 33.696 | 56.403 | 1.00 | 24.79 | C |
| ATOM | 1236 | CB | LEU A 304 | -11.294 | 33.276 | 56.694 | 1.00 | 25.13 | C |
| ATOM | 1239 | CG | LEU A 304 | -11.480 | 31.777 | 56.894 | 1.00 | 27.17 | C |
| ATOM | 1241 | CD1 | LEU A 304 | -12.937 | 31.437 | 57.319 | 1.00 | 27.02 | C |
| ATOM | 1245 | CD2 | LEU A 304 | -11.069 | 31.035 | 55.600 | 1.00 | 28.70 | C |
| ATOM | 1249 | C | LEU A 304 | -9.838 | 34.926 | 55.483 | 1.00 | 24.88 | C |
| ATOM | 1250 | O | LEU A 304 | -9.728 | 34.784 | 54.278 | 1.00 | 25.15 | O |
| ATOM | 1251 | N | LYS A 305 | -9.938 | 36.128 | 56.033 | 1.00 | 24.70 | N |
| ATOM | 1253 | CA | LYS A 305 | -9.977 | 37.306 | 55.173 | 1.00 | 24.80 | C |
| ATOM | 1255 | CB | LYS A 305 | -10.122 | 38.628 | 55.957 | 1.00 | 25.19 | C |
| ATOM | 1258 | CG | LYS A 305 | -11.575 | 39.064 | 56.156 | 1.00 | 27.47 | C |
| ATOM | 1261 | CD | LYS A 305 | -11.731 | 40.506 | 56.674 | 1.00 | 29.14 | C |
| ATOM | 1264 | CE | LYS A 305 | -11.169 | 41.544 | 55.708 | 1.00 | 29.79 | C |
| ATOM | 1267 | NZ | LYS A 305 | -12.152 | 42.664 | 55.499 | 1.00 | 29.76 | N |
| ATOM | 1271 | C | LYS A 305 | -8.738 | 37.360 | 54.307 | 1.00 | 24.04 | C |
| ATOM | 1272 | O | LYS A 305 | -8.842 | 37.631 | 53.127 | 1.00 | 24.22 | O |
| ATOM | 1273 | N | ALA A 306 | -7.576 | 37.100 | 54.893 | 1.00 | 23.38 | N |
| ATOM | 1275 | CA | ALA A 306 | -6.310 | 37.249 | 54.191 | 1.00 | 22.95 | C |
| ATOM | 1277 | CB | ALA A 306 | -5.225 | 37.367 | 55.183 | 1.00 | 23.00 | C |
| ATOM | 1281 | C | ALA A 306 | -6.029 | 36.064 | 53.266 | 1.00 | 23.52 | C |

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ATOM   1282  O    ALA A 306   -5.458  36.226  52.197  1.00 23.67      O
ATOM   1283  N    SER A 307   -6.467  34.877  53.694  1.00 23.82      N
ATOM   1285  CA   SER A 307   -6.222  33.599  53.023  1.00 23.95      C
ATOM   1287  CB   SER A 307   -6.596  32.467  53.986  1.00 24.44      C
ATOM   1290  OG   SER A 307   -5.539  32.160  54.863  1.00 28.57      O
ATOM   1292  C    SER A 307   -7.068  33.348  51.788  1.00 23.00      C
ATOM   1293  O    SER A 307   -6.685  32.637  50.874  1.00 22.83      O
ATOM   1294  N    THR A 308   -8.270  33.870  51.809  1.00 22.03      N
ATOM   1296  CA   THR A 308   -9.257  33.485  50.837  1.00 21.51      C
ATOM   1298  CB   THR A 308  -10.553  34.297  51.065  1.00 21.69      C
ATOM   1300  OG1  THR A 308  -11.122  33.910  52.312  1.00 21.74      O
ATOM   1302  CG2  THR A 308  -11.647  33.909  50.100  1.00 22.66      C
ATOM   1306  C    THR A 308   -8.725  33.603  49.407  1.00 20.49      C
ATOM   1307  O    THR A 308   -8.767  32.632  48.675  1.00 20.62      O
ATOM   1308  N    ILE A 309   -8.206  34.759  49.015  1.00 19.39      N
ATOM   1310  CA   ILE A 309   -7.715  34.924  47.646  1.00 18.77      C
ATOM   1312  CB   ILE A 309   -7.337  36.393  47.351  1.00 18.63      C
ATOM   1314  CG1  ILE A 309   -7.044  36.608  45.855  1.00 19.02      C
ATOM   1317  CD1  ILE A 309   -8.254  36.358  44.924  1.00 19.57      C
ATOM   1321  CG2  ILE A 309   -6.139  36.793  48.139  1.00 18.43      C
ATOM   1325  C    ILE A 309   -6.527  34.004  47.381  1.00 18.63      C
ATOM   1326  O    ILE A 309   -6.354  33.525  46.249  1.00 18.68      O
ATOM   1327  N    GLU A 310   -5.705  33.775  48.413  1.00 18.19      N
ATOM   1329  CA   GLU A 310   -4.515  32.938  48.286  1.00 17.74      C
ATOM   1331  CB   GLU A 310   -3.592  33.055  49.501  1.00 17.22      C
ATOM   1334  CG   GLU A 310   -3.035  34.449  49.613  1.00 17.01      C
ATOM   1337  CD   GLU A 310   -2.126  34.694  50.786  1.00 16.86      C
ATOM   1338  OE1  GLU A 310   -1.578  33.754  51.386  1.00 17.65      O
ATOM   1339  OE2  GLU A 310   -1.964  35.882  51.094  1.00 16.61      O
ATOM   1340  C    GLU A 310   -4.929  31.517  48.080  1.00 18.04      C
ATOM   1341  O    GLU A 310   -4.327  30.824  47.303  1.00 19.07      O
ATOM   1342  N    ILE A 311   -5.978  31.084  48.747  1.00 18.10      N
ATOM   1344  CA   ILE A 311   -6.409  29.721  48.622  1.00 18.31      C
ATOM   1346  CB   ILE A 311   -7.388  29.349  49.738  1.00 18.22      C
ATOM   1348  CG1  ILE A 311   -6.685  29.378  51.088  1.00 19.46      C
ATOM   1351  CD1  ILE A 311   -7.626  29.479  52.271  1.00 20.90      C
ATOM   1355  CG2  ILE A 311   -7.895  27.966  49.527  1.00 19.07      C
ATOM   1359  C    ILE A 311   -7.052  29.577  47.274  1.00 18.37      C
ATOM   1360  O    ILE A 311   -7.004  28.511  46.690  1.00 19.22      O
ATOM   1361  N    MET A 312   -7.657  30.651  46.782  1.00 18.59      N
ATOM   1363  CA   MET A 312   -8.302  30.648  45.483  1.00 19.12      C
ATOM   1365  CB   MET A 312   -9.078  31.951  45.258  1.00 19.36      C
ATOM   1368  CG   MET A 312  -10.465  31.911  45.882  1.00 21.56      C
ATOM   1371  SD   MET A 312  -11.398  33.489  46.069  1.00 24.13      S
ATOM   1372  CE   MET A 312  -12.498  33.369  44.743  1.00 24.71      C
ATOM   1376  C    MET A 312   -7.269  30.479  44.384  1.00 19.31      C
ATOM   1377  O    MET A 312   -7.549  29.928  43.330  1.00 19.64      O
ATOM   1378  N    LEU A 313   -6.073  30.983  44.635  1.00 19.67      N
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ATOM   1380  CA  LEU A 313    -4.998 30.969 43.668 1.00 19.66        C
ATOM   1382  CB  LEU A 313    -3.984 32.036 44.049 1.00 19.66        C
ATOM   1385  CG  LEU A 313    -4.382 33.451 43.609 1.00 19.99        C
ATOM   1387  CD1 LEU A 313    -3.726 34.533 44.426 1.00 20.68        C
ATOM   1391  CD2 LEU A 313    -3.965 33.656 42.193 1.00 20.17        C
ATOM   1395  C   LEU A 313    -4.382 29.580 43.614 1.00 19.87        C
ATOM   1396  O   LEU A 313    -4.102 29.071 42.557 1.00 19.56        O
ATOM   1397  N   LEU A 314    -4.187 28.975 44.768 1.00 20.83        N
ATOM   1399  CA  LEU A 314    -3.805 27.574 44.872 1.00 22.28        C
ATOM   1401  CB  LEU A 314    -3.727 27.163 46.359 1.00 22.48        C
ATOM   1404  CG  LEU A 314    -2.398 27.033 47.141 1.00 23.90        C
ATOM   1406  CD1 LEU A 314    -1.137 27.368 46.355 1.00 24.36        C
ATOM   1410  CD2 LEU A 314    -2.445 27.875 48.405 1.00 24.82        C
ATOM   1414  C   LEU A 314    -4.835 26.670 44.161 1.00 23.33        C
ATOM   1415  O   LEU A 314    -4.491 25.810 43.346 1.00 23.05        O
ATOM   1416  N   GLU A 315    -6.101 26.885 44.498 1.00 24.65        N
ATOM   1418  CA  GLU A 315    -7.195 26.089 43.976 1.00 25.56        C
ATOM   1420  CB  GLU A 315    -8.528 26.462 44.650 1.00 25.69        C
ATOM   1423  CG  GLU A 315    -8.815 25.728 45.979 1.00 28.10        C
ATOM   1426  CD  GLU A 315    -8.859 24.192 45.890 1.00 30.08        C
ATOM   1427  OE1 GLU A 315    -9.321 23.639 44.872 1.00 33.50        O
ATOM   1428  OE2 GLU A 315    -8.428 23.521 46.852 1.00 32.27        O
ATOM   1429  C   GLU A 315    -7.296 26.247 42.469 1.00 25.69        C
ATOM   1430  O   GLU A 315    -7.555 25.285 41.787 1.00 26.52        O
ATOM   1431  N   THR A 316    -7.082 27.448 41.955 1.00 25.90        N
ATOM   1433  CA  THR A 316    -7.090 27.696 40.526 1.00 26.05        C
ATOM   1435  CB  THR A 316    -6.922 29.203 40.277 1.00 26.00        C
ATOM   1437  OG1 THR A 316    -8.093 29.889 40.710 1.00 24.43        O
ATOM   1439  CG2 THR A 316    -6.825 29.557 38.776 1.00 26.36        C
ATOM   1443  C   THR A 316    -5.949 26.911 39.881 1.00 27.15        C
ATOM   1444  O   THR A 316    -6.106 26.291 38.827 1.00 27.00        O
ATOM   1445  N   ALA A 317    -4.792 26.935 40.526 1.00 28.49        N
ATOM   1447  CA  ALA A 317    -3.647 26.202 40.032 1.00 29.48        C
ATOM   1449  CB  ALA A 317    -2.414 26.524 40.852 1.00 29.09        C
ATOM   1453  C   ALA A 317    -3.946 24.693 40.025 1.00 30.57        C
ATOM   1454  O   ALA A 317    -3.513 23.991 39.109 1.00 30.74        O
ATOM   1455  N   ARG A 318    -4.687 24.216 41.028 1.00 31.85        N
ATOM   1457  CA  ARG A 318    -5.126 22.825 41.101 1.00 33.09        C
ATOM   1459  CB  ARG A 318    -5.911 22.570 42.392 1.00 33.39        C
ATOM   1462  CG  ARG A 318    -5.487 21.303 43.102 1.00 36.52        C
ATOM   1465  CD  ARG A 318    -5.983 21.150 44.538 1.00 41.24        C
ATOM   1468  NE  ARG A 318    -6.420 19.776 44.794 1.00 44.94        N
ATOM   1470  CZ  ARG A 318    -7.700 19.383 44.906 1.00 49.98        C
ATOM   1471  NH1 ARG A 318    -8.712 20.264 44.812 1.00 51.18        N
ATOM   1474  NH2 ARG A 318    -7.985 18.089 45.115 1.00 51.48        N
ATOM   1477  C   ARG A 318    -5.984 22.488 39.874 1.00 33.69        C
ATOM   1478  O   ARG A 318    -5.744 21.492 39.180 1.00 33.38        O
ATOM   1479  N   ARG A 319    -6.941 23.375 39.589 1.00 34.59        N

| ATOM | 1481 | CA | ARG A 319 | -7.887 | 23.259 | 38.465 | 1.00 | 35.10 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1483 | CB | ARG A 319 | -9.108 | 24.159 | 38.716 | 1.00 | 34.88 | C |
| ATOM | 1486 | CG | ARG A 319 | -9.918 | 23.762 | 39.930 | 1.00 | 35.78 | C |
| ATOM | 1489 | CD | ARG A 319 | -11.099 | 24.665 | 40.185 | 1.00 | 38.17 | C |
| ATOM | 1492 | NE | ARG A 319 | -11.891 | 24.243 | 41.351 | 1.00 | 39.91 | N |
| ATOM | 1494 | CZ | ARG A 319 | -12.277 | 25.046 | 42.355 | 1.00 | 41.85 | C |
| ATOM | 1495 | NH1 | ARG A 319 | -11.947 | 26.339 | 42.397 | 1.00 | 42.33 | N |
| ATOM | 1498 | NH2 | ARG A 319 | -12.985 | 24.543 | 43.353 | 1.00 | 43.47 | N |
| ATOM | 1501 | C | ARG A 319 | -7.285 | 23.598 | 37.093 | 1.00 | 35.47 | C |
| ATOM | 1502 | O | ARG A 319 | -7.976 | 23.569 | 36.076 | 1.00 | 35.25 | O |
| ATOM | 1503 | N | TYR A 320 | -6.003 | 23.934 | 37.066 | 1.00 | 36.30 | N |
| ATOM | 1505 | CA | TYR A 320 | -5.333 | 24.270 | 35.818 | 1.00 | 36.91 | C |
| ATOM | 1507 | CB | TYR A 320 | -4.014 | 25.004 | 36.080 | 1.00 | 36.73 | C |
| ATOM | 1510 | CG | TYR A 320 | -3.309 | 25.509 | 34.837 | 1.00 | 36.21 | C |
| ATOM | 1511 | CD1 | TYR A 320 | -3.835 | 26.560 | 34.077 | 1.00 | 36.01 | C |
| ATOM | 1513 | CE1 | TYR A 320 | -3.161 | 27.041 | 32.939 | 1.00 | 35.49 | C |
| ATOM | 1515 | CZ | TYR A 320 | -1.952 | 26.461 | 32.557 | 1.00 | 35.82 | C |
| ATOM | 1516 | OH | TYR A 320 | -1.250 | 26.900 | 31.438 | 1.00 | 36.55 | O |
| ATOM | 1518 | CE2 | TYR A 320 | -1.432 | 25.416 | 33.299 | 1.00 | 35.51 | C |
| ATOM | 1520 | CD2 | TYR A 320 | -2.107 | 24.948 | 34.429 | 1.00 | 35.41 | C |
| ATOM | 1522 | C | TYR A 320 | -5.081 | 22.984 | 35.058 | 1.00 | 37.52 | C |
| ATOM | 1523 | O | TYR A 320 | -4.856 | 21.920 | 35.656 | 1.00 | 37.77 | O |
| ATOM | 1524 | N | ASN A 321 | -5.132 | 23.095 | 33.741 | 1.00 | 38.08 | N |
| ATOM | 1526 | CA | ASN A 321 | -4.933 | 21.965 | 32.868 | 1.00 | 38.74 | C |
| ATOM | 1528 | CB | ASN A 321 | -6.292 | 21.542 | 32.305 | 1.00 | 39.04 | C |
| ATOM | 1531 | CG | ASN A 321 | -6.270 | 20.161 | 31.660 | 1.00 | 39.71 | C |
| ATOM | 1532 | OD1 | ASN A 321 | -5.695 | 19.212 | 32.207 | 1.00 | 39.37 | O |
| ATOM | 1533 | ND2 | ASN A 321 | -6.921 | 20.040 | 30.495 | 1.00 | 40.27 | N |
| ATOM | 1536 | C | ASN A 321 | -3.975 | 22.450 | 31.795 | 1.00 | 39.20 | C |
| ATOM | 1537 | O | ASN A 321 | -4.361 | 23.240 | 30.934 | 1.00 | 38.92 | O |
| ATOM | 1538 | N | HIS A 322 | -2.714 | 22.017 | 31.880 | 1.00 | 39.98 | N |
| ATOM | 1540 | CA | HIS A 322 | -1.655 | 22.572 | 31.029 | 1.00 | 40.64 | C |
| ATOM | 1542 | CB | HIS A 322 | -0.274 | 22.102 | 31.487 | 1.00 | 40.96 | C |
| ATOM | 1545 | CG | HIS A 322 | 0.864 | 22.772 | 30.767 | 1.00 | 42.17 | C |
| ATOM | 1546 | ND1 | HIS A 322 | 1.029 | 24.142 | 30.741 | 1.00 | 42.91 | N |
| ATOM | 1548 | CE1 | HIS A 322 | 2.112 | 24.440 | 30.042 | 1.00 | 43.21 | C |
| ATOM | 1550 | NE2 | HIS A 322 | 2.653 | 23.314 | 29.608 | 1.00 | 43.01 | N |
| ATOM | 1552 | CD2 | HIS A 322 | 1.889 | 22.256 | 30.042 | 1.00 | 42.88 | C |
| ATOM | 1554 | C | HIS A 322 | -1.851 | 22.243 | 29.549 | 1.00 | 40.86 | C |
| ATOM | 1555 | O | HIS A 322 | -1.574 | 23.078 | 28.683 | 1.00 | 41.03 | O |
| ATOM | 1556 | N | GLU A 323 | -2.317 | 21.027 | 29.264 | 1.00 | 41.10 | N |
| ATOM | 1558 | CA | GLU A 323 | -2.709 | 20.652 | 27.904 | 1.00 | 41.20 | C |
| ATOM | 1560 | CB | GLU A 323 | -3.456 | 19.306 | 27.896 | 1.00 | 41.38 | C |
| ATOM | 1563 | CG | GLU A 323 | -2.655 | 18.079 | 28.329 | 1.00 | 41.67 | C |
| ATOM | 1566 | CD | GLU A 323 | -3.403 | 16.773 | 28.066 | 1.00 | 41.89 | C |
| ATOM | 1567 | OE1 | GLU A 323 | -4.263 | 16.390 | 28.904 | 1.00 | 41.85 | O |
| ATOM | 1568 | OE2 | GLU A 323 | -3.140 | 16.137 | 27.018 | 1.00 | 40.22 | O |
| ATOM | 1569 | C | GLU A 323 | -3.606 | 21.733 | 27.270 | 1.00 | 41.09 | C |

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| ATOM | 1570 | O   | GLU A 323 | -3.355  | 22.148 | 26.142 | 1.00 | 40.95 | O |
|------|------|-----|-----------|---------|--------|--------|------|-------|---|
| ATOM | 1571 | N   | THR A 324 | -4.626  | 22.190 | 28.015 | 1.00 | 41.03 | N |
| ATOM | 1573 | CA  | THR A 324 | -5.670  | 23.114 | 27.504 | 1.00 | 40.78 | C |
| ATOM | 1575 | CB  | THR A 324 | -7.095  | 22.609 | 27.932 | 1.00 | 40.89 | C |
| ATOM | 1577 | OG1 | THR A 324 | -7.189  | 22.469 | 29.362 | 1.00 | 39.74 | O |
| ATOM | 1579 | CG2 | THR A 324 | -7.387  | 21.187 | 27.379 | 1.00 | 40.81 | C |
| ATOM | 1583 | C   | THR A 324 | -5.533  | 24.626 | 27.852 | 1.00 | 40.66 | C |
| ATOM | 1584 | O   | THR A 324 | -6.207  | 25.455 | 27.232 | 1.00 | 40.67 | O |
| ATOM | 1585 | N   | GLU A 325 | -4.659  | 24.975 | 28.802 | 1.00 | 40.26 | N |
| ATOM | 1587 | CA  | GLU A 325 | -4.478  | 26.359 | 29.285 | 1.00 | 40.12 | C |
| ATOM | 1589 | CB  | GLU A 325 | -3.905  | 27.276 | 28.182 | 1.00 | 40.18 | C |
| ATOM | 1592 | CG  | GLU A 325 | -2.419  | 27.589 | 28.320 | 1.00 | 40.42 | C |
| ATOM | 1595 | CD  | GLU A 325 | -1.562  | 26.845 | 27.301 | 1.00 | 41.51 | C |
| ATOM | 1596 | OE1 | GLU A 325 | -1.843  | 25.658 | 27.002 | 1.00 | 41.27 | O |
| ATOM | 1597 | OE2 | GLU A 325 | -0.595  | 27.450 | 26.787 | 1.00 | 42.41 | O |
| ATOM | 1598 | C   | GLU A 325 | -5.738  | 26.999 | 29.917 | 1.00 | 39.99 | C |
| ATOM | 1599 | O   | GLU A 325 | -5.946  | 28.221 | 29.812 | 1.00 | 40.10 | O |
| ATOM | 1600 | N   | CYS A 326 | -6.541  | 26.183 | 30.609 | 1.00 | 39.50 | N |
| ATOM | 1602 | CA  | CYS A 326 | -7.790  | 26.640 | 31.228 | 1.00 | 38.95 | C |
| ATOM | 1604 | CB  | CYS A 326 | -8.992  | 26.185 | 30.401 | 1.00 | 39.01 | C |
| ATOM | 1607 | SG  | CYS A 326 | -9.111  | 26.981 | 28.799 | 1.00 | 38.58 | S |
| ATOM | 1608 | C   | CYS A 326 | -7.992  | 26.138 | 32.643 | 1.00 | 38.53 | C |
| ATOM | 1609 | O   | CYS A 326 | -7.344  | 25.183 | 33.093 | 1.00 | 38.33 | O |
| ATOM | 1610 | N   | ILE A 327 | -8.945  | 26.771 | 33.316 | 1.00 | 37.77 | N |
| ATOM | 1612 | CA  | ILE A 327 | -9.236  | 26.471 | 34.697 | 1.00 | 37.49 | C |
| ATOM | 1614 | CB  | ILE A 327 | -9.142  | 27.781 | 35.509 | 1.00 | 37.81 | C |
| ATOM | 1616 | CG1 | ILE A 327 | -7.742  | 28.428 | 35.312 | 1.00 | 37.66 | C |
| ATOM | 1619 | CD1 | ILE A 327 | -7.733  | 29.940 | 35.326 | 1.00 | 36.71 | C |
| ATOM | 1623 | CG2 | ILE A 327 | -9.465  | 27.528 | 37.007 | 1.00 | 37.15 | C |
| ATOM | 1627 | C   | ILE A 327 | -10.618 | 25.824 | 34.786 | 1.00 | 37.10 | C |
| ATOM | 1628 | O   | ILE A 327 | -11.616 | 26.483 | 34.552 | 1.00 | 37.07 | O |
| ATOM | 1629 | N   | THR A 328 | -10.662 | 24.538 | 35.125 | 1.00 | 36.78 | N |
| ATOM | 1631 | CA  | THR A 328 | -11.886 | 23.740 | 35.080 | 1.00 | 36.62 | C |
| ATOM | 1633 | CB  | THR A 328 | -11.592 | 22.371 | 34.445 | 1.00 | 36.47 | C |
| ATOM | 1635 | OG1 | THR A 328 | -10.710 | 22.524 | 33.335 | 1.00 | 35.61 | O |
| ATOM | 1637 | CG2 | THR A 328 | -12.848 | 21.766 | 33.860 | 1.00 | 36.27 | C |
| ATOM | 1641 | C   | THR A 328 | -12.499 | 23.480 | 36.456 | 1.00 | 37.12 | C |
| ATOM | 1642 | O   | THR A 328 | -12.047 | 22.567 | 37.178 | 1.00 | 37.38 | O |
| ATOM | 1643 | N   | PHE A 329 | -13.539 | 24.250 | 36.799 | 1.00 | 37.04 | N |
| ATOM | 1645 | CA  | PHE A 329 | -14.393 | 23.973 | 37.963 | 1.00 | 36.98 | C |
| ATOM | 1647 | CB  | PHE A 329 | -15.369 | 25.106 | 38.138 | 1.00 | 37.16 | C |
| ATOM | 1650 | CG  | PHE A 329 | -14.738 | 26.338 | 38.646 | 1.00 | 38.09 | C |
| ATOM | 1651 | CD1 | PHE A 329 | -14.309 | 27.316 | 37.774 | 1.00 | 38.50 | C |
| ATOM | 1653 | CE1 | PHE A 329 | -13.726 | 28.470 | 38.256 | 1.00 | 39.61 | C |
| ATOM | 1655 | CZ  | PHE A 329 | -13.545 | 28.646 | 39.629 | 1.00 | 39.60 | C |
| ATOM | 1657 | CE2 | PHE A 329 | -13.963 | 27.667 | 40.501 | 1.00 | 39.64 | C |
| ATOM | 1659 | CD2 | PHE A 329 | -14.556 | 26.517 | 40.010 | 1.00 | 39.10 | C |
| ATOM | 1661 | C   | PHE A 329 | -15.189 | 22.653 | 37.917 | 1.00 | 36.78 | C |

| ATOM | 1662 | O | PHE A 329 | -15.187 | 21.881 | 38.884 | 1.00 | 37.36 | O |
|------|------|-----|-----------|---------|--------|--------|------|-------|---|
| ATOM | 1663 | N | LEU A 330 | -15.903 | 22.416 | 36.824 | 1.00 | 36.01 | N |
| ATOM | 1665 | CA | LEU A 330 | -16.477 | 21.095 | 36.574 | 1.00 | 35.45 | C |
| ATOM | 1667 | CB | LEU A 330 | -17.773 | 20.911 | 37.375 | 1.00 | 35.35 | C |
| ATOM | 1670 | CG | LEU A 330 | -18.838 | 21.996 | 37.204 | 1.00 | 35.24 | C |
| ATOM | 1672 | CD1 | LEU A 330 | -20.224 | 21.375 | 37.099 | 1.00 | 34.65 | C |
| ATOM | 1676 | CD2 | LEU A 330 | -18.771 | 23.012 | 38.342 | 1.00 | 35.02 | C |
| ATOM | 1680 | C | LEU A 330 | -16.689 | 20.911 | 35.067 | 1.00 | 35.15 | C |
| ATOM | 1681 | O | LEU A 330 | -16.214 | 21.729 | 34.284 | 1.00 | 35.20 | O |
| ATOM | 1682 | N | LYS A 331 | -17.370 | 19.842 | 34.653 | 1.00 | 34.67 | N |
| ATOM | 1684 | CA | LYS A 331 | -17.650 | 19.642 | 33.235 | 1.00 | 34.60 | C |
| ATOM | 1686 | CB | LYS A 331 | -18.594 | 18.450 | 32.996 | 1.00 | 34.84 | C |
| ATOM | 1689 | CG | LYS A 331 | -18.187 | 17.152 | 33.694 | 1.00 | 36.07 | C |
| ATOM | 1692 | CD | LYS A 331 | -17.697 | 16.071 | 32.717 | 1.00 | 37.53 | C |
| ATOM | 1695 | CE | LYS A 331 | -16.590 | 15.173 | 33.334 | 1.00 | 37.55 | C |
| ATOM | 1698 | NZ | LYS A 331 | -17.013 | 13.739 | 33.451 | 1.00 | 37.10 | N |
| ATOM | 1702 | C | LYS A 331 | -18.304 | 20.912 | 32.708 | 1.00 | 33.99 | C |
| ATOM | 1703 | O | LYS A 331 | -19.228 | 21.421 | 33.338 | 1.00 | 34.33 | O |
| ATOM | 1704 | N | ASP A 332 | -17.805 | 21.434 | 31.586 | 1.00 | 33.07 | N |
| ATOM | 1706 | CA | ASP A 332 | -18.426 | 22.566 | 30.872 | 1.00 | 32.35 | C |
| ATOM | 1708 | CB | ASP A 332 | -19.907 | 22.283 | 30.586 | 1.00 | 32.01 | C |
| ATOM | 1711 | CG | ASP A 332 | -20.091 | 21.165 | 29.608 | 1.00 | 31.87 | C |
| ATOM | 1712 | OD1 | ASP A 332 | -19.396 | 21.164 | 28.574 | 1.00 | 31.76 | O |
| ATOM | 1713 | OD2 | ASP A 332 | -20.907 | 20.242 | 29.774 | 1.00 | 32.07 | O |
| ATOM | 1714 | C | ASP A 332 | -18.279 | 23.950 | 31.515 | 1.00 | 31.90 | C |
| ATOM | 1715 | O | ASP A 332 | -18.887 | 24.910 | 31.057 | 1.00 | 32.08 | O |
| ATOM | 1716 | N | PHE A 333 | -17.471 | 24.066 | 32.556 | 1.00 | 31.47 | N |
| ATOM | 1718 | CA | PHE A 333 | -17.178 | 25.367 | 33.157 | 1.00 | 31.12 | C |
| ATOM | 1720 | CB | PHE A 333 | -17.792 | 25.486 | 34.552 | 1.00 | 31.25 | C |
| ATOM | 1723 | CG | PHE A 333 | -19.276 | 25.713 | 34.537 | 1.00 | 30.67 | C |
| ATOM | 1724 | CD1 | PHE A 333 | -20.154 | 24.635 | 34.520 | 1.00 | 30.49 | C |
| ATOM | 1726 | CE1 | PHE A 333 | -21.531 | 24.834 | 34.492 | 1.00 | 31.19 | C |
| ATOM | 1728 | CZ | PHE A 333 | -22.040 | 26.127 | 34.498 | 1.00 | 31.20 | C |
| ATOM | 1730 | CE2 | PHE A 333 | -21.165 | 27.213 | 34.518 | 1.00 | 30.95 | C |
| ATOM | 1732 | CD2 | PHE A 333 | -19.792 | 27.000 | 34.534 | 1.00 | 30.37 | C |
| ATOM | 1734 | C | PHE A 333 | -15.673 | 25.509 | 33.218 | 1.00 | 30.89 | C |
| ATOM | 1735 | O | PHE A 333 | -15.061 | 25.168 | 34.232 | 1.00 | 30.67 | O |
| ATOM | 1736 | N | THR A 334 | -15.113 | 25.977 | 32.095 | 1.00 | 30.70 | N |
| ATOM | 1738 | CA | THR A 334 | -13.679 | 26.182 | 31.887 | 1.00 | 30.50 | C |
| ATOM | 1740 | CB | THR A 334 | -13.126 | 25.236 | 30.798 | 1.00 | 30.73 | C |
| ATOM | 1742 | OG1 | THR A 334 | -14.116 | 24.273 | 30.413 | 1.00 | 30.85 | O |
| ATOM | 1744 | CG2 | THR A 334 | -11.959 | 24.400 | 31.335 | 1.00 | 31.05 | C |
| ATOM | 1748 | C | THR A 334 | -13.430 | 27.605 | 31.433 | 1.00 | 30.36 | C |
| ATOM | 1749 | O | THR A 334 | -14.285 | 28.198 | 30.782 | 1.00 | 30.22 | O |
| ATOM | 1750 | N | TYR A 335 | -12.252 | 28.143 | 31.760 | 1.00 | 30.49 | N |
| ATOM | 1752 | CA | TYR A 335 | -11.945 | 29.554 | 31.504 | 1.00 | 30.52 | C |
| ATOM | 1754 | CB | TYR A 335 | -12.281 | 30.417 | 32.744 | 1.00 | 30.50 | C |
| ATOM | 1757 | CG | TYR A 335 | -13.725 | 30.253 | 33.151 | 1.00 | 29.73 | C |

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ATOM  1758 CD1 TYR A 335   -14.111 29.211 33.988 1.00 29.00        C
ATOM  1760 CE1 TYR A 335   -15.437 29.008 34.319 1.00 29.25        C
ATOM  1762 CZ  TYR A 335   -16.404 29.848 33.813 1.00 29.43        C
ATOM  1763 OH  TYR A 335   -17.728 29.640 34.157 1.00 29.83        O
ATOM  1765 CE2 TYR A 335   -16.047 30.890 32.964 1.00 29.62        C
ATOM  1767 CD2 TYR A 335   -14.711 31.082 32.634 1.00 29.34        C
ATOM  1769 C   TYR A 335   -10.499 29.746 31.054 1.00 30.71        C
ATOM  1770 O   TYR A 335    -9.557 29.311 31.731 1.00 30.82        O
ATOM  1771 N   SER A 336   -10.355 30.397 29.900 1.00 30.62        N
ATOM  1773 CA  SER A 336    -9.067 30.653 29.275 1.00 30.64        C
ATOM  1775 CB  SER A 336    -9.190 30.444 27.760 1.00 30.56        C
ATOM  1778 OG  SER A 336    -9.901 31.505 27.136 1.00 30.44        O
ATOM  1780 C   SER A 336    -8.596 32.081 29.570 1.00 30.66        C
ATOM  1781 O   SER A 336    -9.396 32.923 29.964 1.00 30.70        O
ATOM  1782 N   LYS A 337    -7.309 32.351 29.345 1.00 30.48        N
ATOM  1784 CA  LYS A 337    -6.727 33.684 29.534 1.00 30.56        C
ATOM  1786 CB  LYS A 337    -5.314 33.747 28.927 1.00 31.14        C
ATOM  1789 CG  LYS A 337    -4.155 33.988 29.928 1.00 32.14        C
ATOM  1792 CD  LYS A 337    -2.765 33.637 29.325 1.00 33.30        C
ATOM  1795 CE  LYS A 337    -2.704 32.176 28.795 1.00 33.77        C
ATOM  1798 NZ  LYS A 337    -1.345 31.557 28.831 1.00 33.44        N
ATOM  1802 C   LYS A 337    -7.569 34.772 28.894 1.00 30.26        C
ATOM  1803 O   LYS A 337    -7.521 35.928 29.313 1.00 30.04        O
ATOM  1804 N   ASP A 338    -8.305 34.402 27.845 1.00 30.27        N
ATOM  1806 CA  ASP A 338    -9.172 35.336 27.121 1.00 29.97        C
ATOM  1808 CB  ASP A 338    -9.520 34.794 25.734 1.00 30.06        C
ATOM  1811 CG  ASP A 338    -8.406 34.976 24.760 1.00 29.95        C
ATOM  1812 OD1 ASP A 338    -7.236 34.956 25.216 1.00 29.17        O
ATOM  1813 OD2 ASP A 338    -8.607 35.155 23.535 1.00 30.85        O
ATOM  1814 C   ASP A 338   -10.451 35.607 27.867 1.00 29.57        C
ATOM  1815 O   ASP A 338   -10.830 36.759 28.065 1.00 29.03        O
ATOM  1816 N   ASP A 339   -11.119 34.529 28.256 1.00 29.61        N
ATOM  1818 CA  ASP A 339   -12.340 34.613 29.051 1.00 29.76        C
ATOM  1820 CB  ASP A 339   -12.776 33.208 29.519 1.00 29.82        C
ATOM  1823 CG  ASP A 339   -13.224 32.292 28.352 1.00 30.31        C
ATOM  1824 OD1 ASP A 339   -13.350 32.747 27.192 1.00 29.58        O
ATOM  1825 OD2 ASP A 339   -13.471 31.079 28.511 1.00 31.96        O
ATOM  1826 C   ASP A 339   -12.173 35.590 30.238 1.00 29.61        C
ATOM  1827 O   ASP A 339   -13.081 36.367 30.528 1.00 29.84        O
ATOM  1828 N   PHE A 340   -11.004 35.578 30.885 1.00 29.50        N
ATOM  1830 CA  PHE A 340   -10.685 36.523 31.970 1.00 29.32        C
ATOM  1832 CB  PHE A 340    -9.293 36.251 32.549 1.00 29.08        C
ATOM  1835 CG  PHE A 340    -9.238 35.138 33.575 1.00 27.85        C
ATOM  1836 CD1 PHE A 340    -9.486 33.827 33.214 1.00 26.34        C
ATOM  1838 CE1 PHE A 340    -9.412 32.806 34.123 1.00 26.55        C
ATOM  1840 CZ  PHE A 340    -9.065 33.070 35.429 1.00 28.40        C
ATOM  1842 CE2 PHE A 340    -8.784 34.382 35.816 1.00 28.88        C
ATOM  1844 CD2 PHE A 340    -8.871 35.407 34.885 1.00 28.20        C
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| ATOM | 1846 | C | PHE | A | 340 | -10.712 | 37.968 | 31.478 | 1.00 | 29.75 | C |
|------|------|----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 1847 | O | PHE | A | 340 | -11.339 | 38.829 | 32.078 | 1.00 | 29.51 | O |
| ATOM | 1848 | N | HIS | A | 341 | -10.004 | 38.225 | 30.385 | 1.00 | 30.66 | N |
| ATOM | 1850 | CA | HIS | A | 341 | -9.967 | 39.556 | 29.772 | 1.00 | 31.34 | C |
| ATOM | 1852 | CB | HIS | A | 341 | -9.107 | 39.538 | 28.498 | 1.00 | 31.57 | C |
| ATOM | 1855 | CG | HIS | A | 341 | -8.584 | 40.887 | 28.107 | 1.00 | 33.26 | C |
| ATOM | 1856 | ND1 | HIS | A | 341 | -7.731 | 41.618 | 28.914 | 1.00 | 34.11 | N |
| ATOM | 1858 | CE1 | HIS | A | 341 | -7.451 | 42.766 | 28.319 | 1.00 | 35.02 | C |
| ATOM | 1860 | NE2 | HIS | A | 341 | -8.087 | 42.805 | 27.156 | 1.00 | 34.36 | N |
| ATOM | 1862 | CD2 | HIS | A | 341 | -8.801 | 41.642 | 26.998 | 1.00 | 33.85 | C |
| ATOM | 1864 | C | HIS | A | 341 | -11.362 | 40.103 | 29.461 | 1.00 | 31.38 | C |
| ATOM | 1865 | O | HIS | A | 341 | -11.612 | 41.293 | 29.628 | 1.00 | 31.11 | O |
| ATOM | 1866 | N | ARG | A | 342 | -12.261 | 39.220 | 29.031 | 1.00 | 31.76 | N |
| ATOM | 1868 | CA | ARG | A | 342 | -13.625 | 39.597 | 28.653 | 1.00 | 32.13 | C |
| ATOM | 1870 | CB | ARG | A | 342 | -14.335 | 38.433 | 27.951 | 1.00 | 32.29 | C |
| ATOM | 1873 | CG | ARG | A | 342 | -13.904 | 38.255 | 26.504 | 1.00 | 33.17 | C |
| ATOM | 1876 | CD | ARG | A | 342 | -13.552 | 36.819 | 26.123 | 1.00 | 34.29 | C |
| ATOM | 1879 | NE | ARG | A | 342 | -13.140 | 36.722 | 24.721 | 1.00 | 35.20 | N |
| ATOM | 1881 | CZ | ARG | A | 342 | -12.705 | 35.612 | 24.123 | 1.00 | 35.30 | C |
| ATOM | 1882 | NH1 | ARG | A | 342 | -12.602 | 34.464 | 24.788 | 1.00 | 34.47 | N |
| ATOM | 1885 | NH2 | ARG | A | 342 | -12.372 | 35.656 | 22.838 | 1.00 | 36.13 | N |
| ATOM | 1888 | C | ARG | A | 342 | -14.452 | 40.034 | 29.845 | 1.00 | 31.97 | C |
| ATOM | 1889 | O | ARG | A | 342 | -15.360 | 40.857 | 29.706 | 1.00 | 32.19 | O |
| ATOM | 1890 | N | ALA | A | 343 | -14.130 | 39.477 | 31.008 | 1.00 | 31.72 | N |
| ATOM | 1892 | CA | ALA | A | 343 | -14.811 | 39.807 | 32.257 | 1.00 | 31.67 | C |
| ATOM | 1894 | CB | ALA | A | 343 | -14.631 | 38.659 | 33.278 | 1.00 | 31.71 | C |
| ATOM | 1898 | C | ALA | A | 343 | -14.353 | 41.135 | 32.870 | 1.00 | 31.51 | C |
| ATOM | 1899 | O | ALA | A | 343 | -14.768 | 41.476 | 33.980 | 1.00 | 31.63 | O |
| ATOM | 1900 | N | GLY | A | 344 | -13.493 | 41.868 | 32.166 | 1.00 | 31.27 | N |
| ATOM | 1902 | CA | GLY | A | 344 | -13.075 | 43.197 | 32.587 | 1.00 | 31.26 | C |
| ATOM | 1905 | C | GLY | A | 344 | -11.712 | 43.224 | 33.244 | 1.00 | 31.18 | C |
| ATOM | 1906 | O | GLY | A | 344 | -11.175 | 44.296 | 33.535 | 1.00 | 31.19 | O |
| ATOM | 1907 | N | LEU | A | 345 | -11.147 | 42.041 | 33.459 | 1.00 | 31.06 | N |
| ATOM | 1909 | CA | LEU | A | 345 | -9.919 | 41.898 | 34.215 | 1.00 | 30.88 | C |
| ATOM | 1911 | CB | LEU | A | 345 | -9.743 | 40.444 | 34.681 | 1.00 | 30.90 | C |
| ATOM | 1914 | CG | LEU | A | 345 | -10.874 | 39.685 | 35.411 | 1.00 | 29.95 | C |
| ATOM | 1916 | CD1 | LEU | A | 345 | -10.279 | 38.606 | 36.275 | 1.00 | 30.17 | C |
| ATOM | 1920 | CD2 | LEU | A | 345 | -11.741 | 40.559 | 36.257 | 1.00 | 29.30 | C |
| ATOM | 1924 | C | LEU | A | 345 | -8.684 | 42.371 | 33.426 | 1.00 | 31.15 | C |
| ATOM | 1925 | O | LEU | A | 345 | -8.472 | 42.013 | 32.263 | 1.00 | 31.10 | O |
| ATOM | 1926 | N | GLN | A | 346 | -7.915 | 43.232 | 34.084 | 1.00 | 31.43 | N |
| ATOM | 1928 | CA | GLN | A | 346 | -6.570 | 43.634 | 33.675 | 1.00 | 31.50 | C |
| ATOM | 1930 | CB | GLN | A | 346 | -5.902 | 44.374 | 34.841 | 1.00 | 31.89 | C |
| ATOM | 1933 | CG | GLN | A | 346 | -6.224 | 45.842 | 34.993 | 1.00 | 31.90 | C |
| ATOM | 1936 | CD | GLN | A | 346 | -5.473 | 46.429 | 36.181 | 1.00 | 31.13 | C |
| ATOM | 1937 | OE1 | GLN | A | 346 | -5.278 | 45.749 | 37.207 | 1.00 | 27.79 | O |
| ATOM | 1938 | NE2 | GLN | A | 346 | -5.031 | 47.682 | 36.040 | 1.00 | 31.01 | N |
| ATOM | 1941 | C | GLN | A | 346 | -5.581 | 42.505 | 33.303 | 1.00 | 31.21 | C |

| ATOM | 1942 | O   | GLN | A 346 | -5.642 | 41.379 | 33.823 | 1.00 | 31.24 | O |
|------|------|-----|-----|-------|--------|--------|--------|------|-------|---|
| ATOM | 1943 | N   | VAL | A 347 | -4.626 | 42.890 | 32.450 | 1.00 | 30.55 | N |
| ATOM | 1945 | CA  | VAL | A 347 | -3.417 | 42.125 | 32.115 | 1.00 | 29.63 | C |
| ATOM | 1947 | CB  | VAL | A 347 | -2.625 | 42.877 | 30.995 | 1.00 | 29.42 | C |
| ATOM | 1949 | CG1 | VAL | A 347 | -1.342 | 42.155 | 30.655 | 1.00 | 28.92 | C |
| ATOM | 1953 | CG2 | VAL | A 347 | -3.512 | 43.083 | 29.740 | 1.00 | 29.39 | C |
| ATOM | 1957 | C   | VAL | A 347 | -2.513 | 41.962 | 33.350 | 1.00 | 28.89 | C |
| ATOM | 1958 | O   | VAL | A 347 | -1.935 | 40.899 | 33.591 | 1.00 | 28.20 | O |
| ATOM | 1959 | N   | GLU | A 348 | -2.406 | 43.050 | 34.109 | 1.00 | 28.28 | N |
| ATOM | 1961 | CA  | GLU | A 348 | -1.617 | 43.123 | 35.329 | 1.00 | 28.04 | C |
| ATOM | 1963 | CB  | GLU | A 348 | -1.819 | 44.497 | 35.988 | 1.00 | 28.17 | C |
| ATOM | 1966 | CG  | GLU | A 348 | -1.084 | 45.660 | 35.318 | 1.00 | 28.94 | C |
| ATOM | 1969 | CD  | GLU | A 348 | -1.955 | 46.586 | 34.455 | 1.00 | 30.20 | C |
| ATOM | 1970 | OE1 | GLU | A 348 | -3.106 | 46.221 | 34.132 | 1.00 | 31.40 | O |
| ATOM | 1971 | OE2 | GLU | A 348 | -1.478 | 47.692 | 34.076 | 1.00 | 29.15 | O |
| ATOM | 1972 | C   | GLU | A 348 | -1.923 | 41.997 | 36.337 | 1.00 | 27.64 | C |
| ATOM | 1973 | O   | GLU | A 348 | -1.036 | 41.630 | 37.096 | 1.00 | 27.84 | O |
| ATOM | 1974 | N   | PHE | A 349 | -3.159 | 41.461 | 36.323 | 1.00 | 26.79 | N |
| ATOM | 1976 | CA  | PHE | A 349 | -3.615 | 40.339 | 37.183 | 1.00 | 25.66 | C |
| ATOM | 1978 | CB  | PHE | A 349 | -5.045 | 40.667 | 37.659 | 1.00 | 25.81 | C |
| ATOM | 1981 | CG  | PHE | A 349 | -5.614 | 39.738 | 38.709 | 1.00 | 24.39 | C |
| ATOM | 1982 | CD1 | PHE | A 349 | -4.848 | 39.253 | 39.751 | 1.00 | 25.08 | C |
| ATOM | 1984 | CE1 | PHE | A 349 | -5.424 | 38.413 | 40.750 | 1.00 | 26.06 | C |
| ATOM | 1986 | CZ  | PHE | A 349 | -6.773 | 38.075 | 40.682 | 1.00 | 24.63 | C |
| ATOM | 1988 | CE2 | PHE | A 349 | -7.545 | 38.567 | 39.648 | 1.00 | 24.62 | C |
| ATOM | 1990 | CD2 | PHE | A 349 | -6.963 | 39.401 | 38.672 | 1.00 | 24.98 | C |
| ATOM | 1992 | C   | PHE | A 349 | -3.599 | 38.948 | 36.483 | 1.00 | 25.03 | C |
| ATOM | 1993 | O   | PHE | A 349 | -3.144 | 37.955 | 37.067 | 1.00 | 24.41 | O |
| ATOM | 1994 | N   | ILE | A 350 | -4.074 | 38.889 | 35.235 | 1.00 | 24.18 | N |
| ATOM | 1996 | CA  | ILE | A 350 | -4.278 | 37.609 | 34.540 | 1.00 | 23.99 | C |
| ATOM | 1998 | CB  | ILE | A 350 | -4.933 | 37.800 | 33.128 | 1.00 | 24.26 | C |
| ATOM | 2000 | CG1 | ILE | A 350 | -6.324 | 38.448 | 33.230 | 1.00 | 24.09 | C |
| ATOM | 2003 | CD1 | ILE | A 350 | -6.874 | 39.041 | 31.931 | 1.00 | 22.81 | C |
| ATOM | 2007 | CG2 | ILE | A 350 | -5.044 | 36.428 | 32.384 | 1.00 | 23.98 | C |
| ATOM | 2011 | C   | ILE | A 350 | -3.007 | 36.795 | 34.367 | 1.00 | 24.02 | C |
| ATOM | 2012 | O   | ILE | A 350 | -3.006 | 35.599 | 34.602 | 1.00 | 23.50 | O |
| ATOM | 2013 | N   | ASN | A 351 | -1.939 | 37.437 | 33.900 | 1.00 | 24.57 | N |
| ATOM | 2015 | CA  | ASN | A 351 | -0.691 | 36.723 | 33.604 | 1.00 | 24.66 | C |
| ATOM | 2017 | CB  | ASN | A 351 | 0.256  | 37.568 | 32.756 | 1.00 | 24.65 | C |
| ATOM | 2020 | CG  | ASN | A 351 | -0.263 | 37.755 | 31.365 | 1.00 | 24.79 | C |
| ATOM | 2021 | OD1 | ASN | A 351 | -0.740 | 36.809 | 30.730 | 1.00 | 25.11 | O |
| ATOM | 2022 | ND2 | ASN | A 351 | -0.222 | 38.982 | 30.892 | 1.00 | 24.98 | N |
| ATOM | 2025 | C   | ASN | A 351 | 0.012  | 36.151 | 34.830 | 1.00 | 24.62 | C |
| ATOM | 2026 | O   | ASN | A 351 | 0.413  | 34.991 | 34.802 | 1.00 | 24.84 | O |
| ATOM | 2027 | N   | PRO | A 352 | 0.185  | 36.928 | 35.896 | 1.00 | 24.40 | N |
| ATOM | 2028 | CA  | PRO | A 352 | 0.565  | 36.314 | 37.173 | 1.00 | 24.15 | C |
| ATOM | 2030 | CB  | PRO | A 352 | 0.393  | 37.454 | 38.176 | 1.00 | 23.99 | C |
| ATOM | 2033 | CG  | PRO | A 352 | 0.645  | 38.687 | 37.385 | 1.00 | 23.81 | C |

| ATOM | 2036 | CD | PRO A 352 | 0.145 | 38.402 | 35.981 | 1.00 | 24.27 | C |
| ATOM | 2039 | C | PRO A 352 | -0.305 | 35.097 | 37.501 | 1.00 | 24.08 | C |
| ATOM | 2040 | O | PRO A 352 | 0.268 | 34.092 | 37.910 | 1.00 | 24.00 | O |
| ATOM | 2041 | N | ILE A 353 | -1.622 | 35.160 | 37.281 | 1.00 | 24.06 | N |
| ATOM | 2043 | CA | ILE A 353 | -2.513 | 34.032 | 37.611 | 1.00 | 24.11 | C |
| ATOM | 2045 | CB | ILE A 353 | -4.027 | 34.332 | 37.278 | 1.00 | 23.92 | C |
| ATOM | 2047 | CG1 | ILE A 353 | -4.660 | 35.407 | 38.154 | 1.00 | 24.70 | C |
| ATOM | 2050 | CD1 | ILE A 353 | -3.813 | 35.848 | 39.332 | 1.00 | 28.00 | C |
| ATOM | 2054 | CG2 | ILE A 353 | -4.852 | 33.114 | 37.471 | 1.00 | 24.44 | C |
| ATOM | 2058 | C | ILE A 353 | -2.070 | 32.773 | 36.862 | 1.00 | 23.97 | C |
| ATOM | 2059 | O | ILE A 353 | -1.991 | 31.685 | 37.436 | 1.00 | 23.72 | O |
| ATOM | 2060 | N | PHE A 354 | -1.780 | 32.923 | 35.576 | 1.00 | 23.97 | N |
| ATOM | 2062 | CA | PHE A 354 | -1.463 | 31.771 | 34.734 | 1.00 | 23.93 | C |
| ATOM | 2064 | CB | PHE A 354 | -1.866 | 32.054 | 33.272 | 1.00 | 23.88 | C |
| ATOM | 2067 | CG | PHE A 354 | -3.334 | 31.845 | 33.018 | 1.00 | 24.57 | C |
| ATOM | 2068 | CD1 | PHE A 354 | -4.239 | 32.879 | 33.188 | 1.00 | 25.04 | C |
| ATOM | 2070 | CE1 | PHE A 354 | -5.604 | 32.668 | 32.990 | 1.00 | 25.36 | C |
| ATOM | 2072 | CZ | PHE A 354 | -6.070 | 31.415 | 32.643 | 1.00 | 25.16 | C |
| ATOM | 2074 | CE2 | PHE A 354 | -5.180 | 30.369 | 32.490 | 1.00 | 25.40 | C |
| ATOM | 2076 | CD2 | PHE A 354 | -3.819 | 30.585 | 32.680 | 1.00 | 25.46 | C |
| ATOM | 2078 | C | PHE A 354 | -0.001 | 31.293 | 34.882 | 1.00 | 23.75 | C |
| ATOM | 2079 | O | PHE A 354 | 0.270 | 30.083 | 34.804 | 1.00 | 23.50 | O |
| ATOM | 2080 | N | GLU A 355 | 0.917 | 32.232 | 35.123 | 1.00 | 23.45 | N |
| ATOM | 2082 | CA | GLU A 355 | 2.310 | 31.906 | 35.396 | 1.00 | 23.77 | C |
| ATOM | 2084 | CB | GLU A 355 | 3.191 | 33.166 | 35.490 | 1.00 | 24.05 | C |
| ATOM | 2087 | CG | GLU A 355 | 4.057 | 33.423 | 34.254 | 1.00 | 25.53 | C |
| ATOM | 2090 | CD | GLU A 355 | 3.785 | 34.762 | 33.557 | 1.00 | 26.68 | C |
| ATOM | 2091 | OE1 | GLU A 355 | 4.011 | 34.839 | 32.322 | 1.00 | 23.23 | O |
| ATOM | 2092 | OE2 | GLU A 355 | 3.366 | 35.736 | 34.252 | 1.00 | 28.60 | O |
| ATOM | 2093 | C | GLU A 355 | 2.387 | 31.116 | 36.691 | 1.00 | 23.77 | C |
| ATOM | 2094 | O | GLU A 355 | 2.991 | 30.045 | 36.724 | 1.00 | 24.34 | O |
| ATOM | 2095 | N | PHE A 356 | 1.771 | 31.641 | 37.751 | 1.00 | 23.44 | N |
| ATOM | 2097 | CA | PHE A 356 | 1.651 | 30.923 | 39.019 | 1.00 | 23.10 | C |
| ATOM | 2099 | CB | PHE A 356 | 0.796 | 31.718 | 40.027 | 1.00 | 22.91 | C |
| ATOM | 2102 | CG | PHE A 356 | 0.654 | 31.026 | 41.356 | 1.00 | 22.02 | C |
| ATOM | 2103 | CD1 | PHE A 356 | 1.719 | 30.958 | 42.226 | 1.00 | 20.17 | C |
| ATOM | 2105 | CE1 | PHE A 356 | 1.597 | 30.305 | 43.438 | 1.00 | 19.63 | C |
| ATOM | 2107 | CZ | PHE A 356 | 0.424 | 29.682 | 43.779 | 1.00 | 19.39 | C |
| ATOM | 2109 | CE2 | PHE A 356 | -0.629 | 29.712 | 42.920 | 1.00 | 19.39 | C |
| ATOM | 2111 | CD2 | PHE A 356 | -0.520 | 30.384 | 41.708 | 1.00 | 20.33 | C |
| ATOM | 2113 | C | PHE A 356 | 1.079 | 29.496 | 38.863 | 1.00 | 23.18 | C |
| ATOM | 2114 | O | PHE A 356 | 1.585 | 28.567 | 39.485 | 1.00 | 22.73 | O |
| ATOM | 2115 | N | SER A 357 | 0.036 | 29.340 | 38.047 | 1.00 | 23.58 | N |
| ATOM | 2117 | CA | SER A 357 | -0.638 | 28.052 | 37.853 | 1.00 | 24.38 | C |
| ATOM | 2119 | CB | SER A 357 | -1.936 | 28.239 | 37.079 | 1.00 | 24.48 | C |
| ATOM | 2122 | OG | SER A 357 | -2.976 | 28.664 | 37.937 | 1.00 | 26.05 | O |
| ATOM | 2124 | C | SER A 357 | 0.200 | 27.009 | 37.128 | 1.00 | 24.85 | C |
| ATOM | 2125 | O | SER A 357 | 0.182 | 25.831 | 37.494 | 1.00 | 24.59 | O |

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ATOM  2126 N   ARG A 358    0.917 27.425 36.088 1.00 25.95      N
ATOM  2128 CA  ARG A 358    1.782 26.483 35.367 1.00 27.12      C
ATOM  2130 CB  ARG A 358    1.976 26.867 33.880 1.00 27.46      C
ATOM  2133 CG  ARG A 358    3.024 27.913 33.582 1.00 29.56      C
ATOM  2136 CD  ARG A 358    3.154 28.226 32.100 1.00 31.01      C
ATOM  2139 NE  ARG A 358    2.012 28.996 31.601 1.00 32.84      N
ATOM  2141 CZ  ARG A 358    1.958 30.329 31.508 1.00 33.59      C
ATOM  2142 NH1 ARG A 358    2.985 31.089 31.893 1.00 33.79      N
ATOM  2145 NH2 ARG A 358    0.857 30.907 31.028 1.00 33.55      N
ATOM  2148 C   ARG A 358    3.103 26.224 36.112 1.00 27.17      C
ATOM  2149 O   ARG A 358    3.757 25.196 35.886 1.00 27.45      O
ATOM  2150 N   ALA A 359    3.460 27.129 37.022 1.00 27.10      N
ATOM  2152 CA  ALA A 359    4.512 26.874 37.990 1.00 27.03      C
ATOM  2154 CB  ALA A 359    4.853 28.144 38.735 1.00 27.05      C
ATOM  2158 C   ALA A 359    4.075 25.781 38.969 1.00 27.46      C
ATOM  2159 O   ALA A 359    4.809 24.807 39.187 1.00 27.65      O
ATOM  2160 N   MET A 360    2.880 25.933 39.546 1.00 27.66      N
ATOM  2162 CA  MET A 360    2.373 24.975 40.525 1.00 28.05      C
ATOM  2164 CB  MET A 360    0.987 25.384 41.046 1.00 28.08      C
ATOM  2167 CG  MET A 360    0.942 26.547 42.071 1.00 27.69      C
ATOM  2170 SD  MET A 360    1.915 26.352 43.592 1.00 27.13      S
ATOM  2171 CE  MET A 360.   1.595 24.685 44.069 1.00 28.65      C
ATOM  2175 C   MET A 360    2.291 23.574 39.927 1.00 28.76      C
ATOM  2176 O   MET A 360    2.481 22.576 40.622 1.00 28.81      O
ATOM  2177 N   ARG A 361    2.014 23.497 38.632 1.00 29.78      N
ATOM  2179 CA  ARG A 361    1.901 22.209 37.987 1.00 30.55      C
ATOM  2181 CB  ARG A 361    1.279 22.306 36.595 1.00 31.44      C
ATOM  2184 CG  ARG A 361    0.297 21.164 36.300 1.00 34.83      C
ATOM  2187 CD  ARG A 361   -0.993 21.243 37.162 1.00 38.23      C
ATOM  2190 NE  ARG A 361   -1.927 20.156 36.869 1.00 40.93      N
ATOM  2192 CZ  ARG A 361   -2.863 19.711 37.706 1.00 43.79      C
ATOM  2193 NH1 ARG A 361   -3.008 20.246 38.929 1.00 44.27      N
ATOM  2196 NH2 ARG A 361   -3.661 18.710 37.323 1.00 44.88      N
ATOM  2199 C   ARG A 361    3.246 21.565 37.896 1.00 30.15      C
ATOM  2200 O   ARG A 361    3.359 20.371 38.107 1.00 30.69      O
ATOM  2201 N   ARG A 362    4.276 22.337 37.585 1.00 29.71      N
ATOM  2203 CA  ARG A 362    5.604 21.754 37.443 1.00 29.44      C
ATOM  2205 CB  ARG A 362    6.588 22.765 36.849 1.00 29.94      C
ATOM  2208 CG  ARG A 362    6.363 23.028 35.349 1.00 31.37      C
ATOM  2211 CD  ARG A 362    7.317 24.070 34.731 1.00 33.77      C
ATOM  2214 NE  ARG A 362    6.811 25.447 34.850 1.00 35.63      N
ATOM  2216 CZ  ARG A 362    7.316 26.403 35.645 1.00 36.81      C
ATOM  2217 NH1 ARG A 362    8.367 26.174 36.434 1.00 36.78      N
ATOM  2220 NH2 ARG A 362    6.744 27.610 35.655 1.00 37.45      N
ATOM  2223 C   ARG A 362    6.099 21.209 38.776 1.00 28.50      C
ATOM  2224 O   ARG A 362    7.013 20.396 38.805 1.00 28.18      O
ATOM  2225 N   LEU A 363    5.483 21.656 39.872 1.00 27.78      N
ATOM  2227 CA  LEU A 363    5.747 21.103 41.203 1.00 27.03      C
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 2229 | CB | LEU | A | 363 | 5.261 | 22.052 | 42.294 | 1.00 27.15 | C |
| ATOM | 2232 | CG | LEU | A | 363 | 6.317 | 22.968 | 42.901 | 1.00 27.99 | C |
| ATOM | 2234 | CD1 | LEU | A | 363 | 5.718 | 23.584 | 44.144 | 1.00 28.97 | C |
| ATOM | 2238 | CD2 | LEU | A | 363 | 7.639 | 22.267 | 43.221 | 1.00 27.80 | C |
| ATOM | 2242 | C | LEU | A | 363 | 5.086 | 19.760 | 41.414 | 1.00 26.11 | C |
| ATOM | 2243 | O | LEU | A | 363 | 5.516 | 18.993 | 42.264 | 1.00 25.45 | O |
| ATOM | 2244 | N | GLY | A | 364 | 3.998 | 19.520 | 40.683 | 1.00 25.50 | N |
| ATOM | 2246 | CA | GLY | A | 364 | 3.311 | 18.232 | 40.658 | 1.00 24.98 | C |
| ATOM | 2249 | C | GLY | A | 364 | 2.745 | 17.795 | 42.004 | 1.00 24.25 | C |
| ATOM | 2250 | O | GLY | A | 364 | 2.925 | 16.642 | 42.406 | 1.00 23.67 | O |
| ATOM | 2251 | N | LEU | A | 365 | 2.074 | 18.711 | 42.703 | 1.00 23.67 | N |
| ATOM | 2253 | CA | LEU | A | 365 | 1.633 | 18.436 | 44.064 | 1.00 23.27 | C |
| ATOM | 2255 | CB | LEU | A | 365 | 1.135 | 19.691 | 44.766 | 1.00 23.36 | C |
| ATOM | 2258 | CG | LEU | A | 365 | 2.081 | 20.897 | 44.888 | 1.00 23.89 | C |
| ATOM | 2260 | CD1 | LEU | A | 365 | 1.566 | 21.799 | 46.021 | 1.00 24.37 | C |
| ATOM | 2264 | CD2 | LEU | A | 365 | 3.522 | 20.500 | 45.144 | 1.00 23.24 | C |
| ATOM | 2268 | C | LEU | A | 365 | 0.519 | 17.450 | 43.954 | 1.00 22.78 | C |
| ATOM | 2269 | O | LEU | A | 365 | -0.112 | 17.370 | 42.916 | 1.00 22.26 | O |
| ATOM | 2270 | N | ASP | A | 366 | 0.308 | 16.674 | 45.004 | 1.00 22.71 | N |
| ATOM | 2272 | CA | ASP | A | 366 | -0.795 | 15.727 | 45.029 | 1.00 22.95 | C |
| ATOM | 2274 | CB | ASP | A | 366 | -0.336 | 14.301 | 45.373 | 1.00 23.14 | C |
| ATOM | 2277 | CG | ASP | A | 366 | 0.253 | 14.182 | 46.751 | 1.00 23.28 | C |
| ATOM | 2278 | OD1 | ASP | A | 366 | -0.120 | 14.985 | 47.633 | 1.00 23.31 | O |
| ATOM | 2279 | OD2 | ASP | A | 366 | 1.106 | 13.311 | 47.033 | 1.00 22.90 | O |
| ATOM | 2280 | C | ASP | A | 366 | -1.800 | 16.272 | 45.999 | 1.00 22.93 | C |
| ATOM | 2281 | O | ASP | A | 366 | -1.631 | 17.377 | 46.495 | 1.00 23.08 | O |
| ATOM | 2282 | N | ASP | A | 367 | -2.845 | 15.515 | 46.268 | 1.00 22.85 | N |
| ATOM | 2284 | CA | ASP | A | 367 | -3.944 | 16.038 | 47.053 | 1.00 23.13 | C |
| ATOM | 2286 | CB | ASP | A | 367 | -5.094 | 15.076 | 46.957 | 1.00 23.79 | C |
| ATOM | 2289 | CG | ASP | A | 367 | -5.767 | 15.134 | 45.615 | 1.00 26.26 | C |
| ATOM | 2290 | OD1 | ASP | A | 367 | -5.410 | 16.052 | 44.832 | 1.00 29.21 | O |
| ATOM | 2291 | OD2 | ASP | A | 367 | -6.672 | 14.327 | 45.278 | 1.00 29.18 | O |
| ATOM | 2292 | C | ASP | A | 367 | -3.604 | 16.285 | 48.513 | 1.00 22.72 | C |
| ATOM | 2293 | O | ASP | A | 367 | -4.091 | 17.240 | 49.098 | 1.00 23.37 | O |
| ATOM | 2294 | N | ALA | A | 368 | -2.782 | 15.427 | 49.105 | 1.00 22.13 | N |
| ATOM | 2296 | CA | ALA | A | 368 | -2.327 | 15.625 | 50.473 | 1.00 21.71 | C |
| ATOM | 2298 | CB | ALA | A | 368 | -1.598 | 14.398 | 50.954 | 1.00 21.22 | C |
| ATOM | 2302 | C | ALA | A | 368 | -1.434 | 16.880 | 50.618 | 1.00 22.03 | C |
| ATOM | 2303 | O | ALA | A | 368 | -1.474 | 17.563 | 51.641 | 1.00 22.09 | O |
| ATOM | 2304 | N | GLU | A | 369 | -0.628 | 17.179 | 49.599 | 1.00 21.94 | N |
| ATOM | 2306 | CA | GLU | A | 369 | 0.285 | 18.310 | 49.650 | 1.00 21.54 | C |
| ATOM | 2308 | CB | GLU | A | 369 | 1.361 | 18.159 | 48.582 | 1.00 21.65 | C |
| ATOM | 2311 | CG | GLU | A | 369 | 2.375 | 17.068 | 48.907 | 1.00 21.25 | C |
| ATOM | 2314 | CD | GLU | A | 369 | 3.307 | 16.706 | 47.741 | 1.00 22.31 | C |
| ATOM | 2315 | OE1 | GLU | A | 369 | 4.524 | 16.482 | 47.989 | 1.00 24.33 | O |
| ATOM | 2316 | OE2 | GLU | A | 369 | 2.847 | 16.614 | 46.580 | 1.00 19.72 | O |
| ATOM | 2317 | C | GLU | A | 369 | -0.484 | 19.627 | 49.512 | 1.00 21.69 | C |
| ATOM | 2318 | O | GLU | A | 369 | -0.353 | 20.493 | 50.340 | 1.00 21.18 | O |

| ATOM | 2319 | N   | TYR A 370 | -1.299 | 19.767 | 48.473 | 1.00 | 22.31 | N |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 2321 | CA  | TYR A 370 | -2.213 | 20.909 | 48.342 | 1.00 | 22.52 | C |
| ATOM | 2323 | CB  | TYR A 370 | -3.228 | 20.707 | 47.191 | 1.00 | 22.75 | C |
| ATOM | 2326 | CG  | TYR A 370 | -2.802 | 21.366 | 45.907 | 1.00 | 25.00 | C |
| ATOM | 2327 | CD1 | TYR A 370 | -2.414 | 20.594 | 44.801 | 1.00 | 27.31 | C |
| ATOM | 2329 | CE1 | TYR A 370 | -1.994 | 21.185 | 43.605 | 1.00 | 27.13 | C |
| ATOM | 2331 | CZ  | TYR A 370 | -1.956 | 22.573 | 43.495 | 1.00 | 28.06 | C |
| ATOM | 2332 | OH  | TYR A 370 | -1.540 | 23.144 | 42.305 | 1.00 | 28.74 | O |
| ATOM | 2334 | CE2 | TYR A 370 | -2.333 | 23.373 | 44.580 | 1.00 | 27.58 | C |
| ATOM | 2336 | CD2 | TYR A 370 | -2.767 | 22.756 | 45.786 | 1.00 | 26.97 | C |
| ATOM | 2338 | C   | TYR A 370 | -2.997 | 21.160 | 49.616 | 1.00 | 22.24 | C |
| ATOM | 2339 | O   | TYR A 370 | -3.099 | 22.293 | 50.059 | 1.00 | 22.15 | O |
| ATOM | 2340 | N   | ALA A 371 | -3.605 | 20.120 | 50.179 | 1.00 | 22.32 | N |
| ATOM | 2342 | CA  | ALA A 371 | -4.424 | 20.293 | 51.395 | 1.00 | 22.38 | C |
| ATOM | 2344 | CB  | ALA A 371 | -5.081 | 18.983 | 51.810 | 1.00 | 22.91 | C |
| ATOM | 2348 | C   | ALA A 371 | -3.601 | 20.842 | 52.558 | 1.00 | 22.05 | C |
| ATOM | 2349 | O   | ALA A 371 | -4.029 | 21.783 | 53.221 | 1.00 | 22.36 | O |
| ATOM | 2350 | N   | LEU A 372 | -2.423 | 20.264 | 52.788 | 1.00 | 21.19 | N |
| ATOM | 2352 | CA  | LEU A 372 | -1.548 | 20.728 | 53.842 | 1.00 | 20.94 | C |
| ATOM | 2354 | CB  | LEU A 372 | -0.337 | 19.796 | 54.003 | 1.00 | 20.87 | C |
| ATOM | 2357 | CG  | LEU A 372 | -0.525 | 18.493 | 54.795 | 1.00 | 21.04 | C |
| ATOM | 2359 | CD1 | LEU A 372 | 0.647  | 17.533 | 54.603 | 1.00 | 21.62 | C |
| ATOM | 2363 | CD2 | LEU A 372 | -0.718 | 18.807 | 56.263 | 1.00 | 20.65 | C |
| ATOM | 2367 | C   | LEU A 372 | -1.076 | 22.161 | 53.583 | 1.00 | 21.01 | C |
| ATOM | 2368 | O   | LEU A 372 | -0.946 | 22.924 | 54.517 | 1.00 | 21.41 | O |
| ATOM | 2369 | N   | LEU A 373 | -0.814 | 22.537 | 52.330 | 1.00 | 20.84 | N |
| ATOM | 2371 | CA  | LEU A 373 | -0.300 | 23.880 | 52.027 | 1.00 | 20.73 | C |
| ATOM | 2373 | CB  | LEU A 373 | 0.039  | 24.071 | 50.541 | 1.00 | 20.52 | C |
| ATOM | 2376 | CG  | LEU A 373 | 1.497  | 24.213 | 50.098 | 1.00 | 23.13 | C |
| ATOM | 2378 | CD1 | LEU A 373 | 1.572  | 24.764 | 48.623 | 1.00 | 24.98 | C |
| ATOM | 2382 | CD2 | LEU A 373 | 2.362  | 25.070 | 51.047 | 1.00 | 23.54 | C |
| ATOM | 2386 | C   | LEU A 373 | -1.389 | 24.855 | 52.418 | 1.00 | 20.65 | C |
| ATOM | 2387 | O   | LEU A 373 | -1.126 | 25.974 | 52.905 | 1.00 | 20.59 | O |
| ATOM | 2388 | N   | ILE A 374 | -2.622 | 24.424 | 52.192 | 1.00 | 20.20 | N |
| ATOM | 2390 | CA  | ILE A 374 | -3.734 | 25.283 | 52.438 | 1.00 | 20.59 | C |
| ATOM | 2392 | CB  | ILE A 374 | -4.983 | 24.733 | 51.747 | 1.00 | 21.07 | C |
| ATOM | 2394 | CG1 | ILE A 374 | -4.884 | 25.002 | 50.231 | 1.00 | 21.83 | C |
| ATOM | 2397 | CD1 | ILE A 374 | -5.961 | 24.254 | 49.403 | 1.00 | 21.74 | C |
| ATOM | 2401 | CG2 | ILE A 374 | -6.275 | 25.365 | 52.303 | 1.00 | 20.76 | C |
| ATOM | 2405 | C   | ILE A 374 | -3.886 | 25.464 | 53.945 | 1.00 | 20.73 | C |
| ATOM | 2406 | O   | ILE A 374 | -4.139 | 26.567 | 54.424 | 1.00 | 20.91 | O |
| ATOM | 2407 | N   | ALA A 375 | -3.702 | 24.393 | 54.697 | 1.00 | 20.78 | N |
| ATOM | 2409 | CA  | ALA A 375 | -3.782 | 24.473 | 56.148 | 1.00 | 20.75 | C |
| ATOM | 2411 | CB  | ALA A 375 | -3.617 | 23.067 | 56.772 | 1.00 | 20.83 | C |
| ATOM | 2415 | C   | ALA A 375 | -2.715 | 25.434 | 56.682 | 1.00 | 20.38 | C |
| ATOM | 2416 | O   | ALA A 375 | -2.988 | 26.241 | 57.574 | 1.00 | 20.16 | O |
| ATOM | 2417 | N   | ILE A 376 | -1.517 | 25.336 | 56.113 | 1.00 | 19.84 | N |
| ATOM | 2419 | CA  | ILE A 376 | -0.377 | 26.141 | 56.543 | 1.00 | 20.41 | C |

| ATOM | 2421 | CB | ILE A 376 | 0.897 | 25.644 | 55.826 | 1.00 | 20.33 | C |
|------|------|-----|-----------|-------|--------|--------|------|-------|---|
| ATOM | 2423 | CG1 | ILE A 376 | 1.370 | 24.310 | 56.403 | 1.00 | 19.99 | C |
| ATOM | 2426 | CD1 | ILE A 376 | 2.304 | 23.568 | 55.506 | 1.00 | 20.71 | C |
| ATOM | 2430 | CG2 | ILE A 376 | 1.986 | 26.677 | 55.945 | 1.00 | 20.98 | C |
| ATOM | 2434 | C | ILE A 376 | -0.600 | 27.647 | 56.236 | 1.00 | 20.55 | C |
| ATOM | 2435 | O | ILE A 376 | -0.224 | 28.543 | 57.002 | 1.00 | 19.68 | O |
| ATOM | 2436 | N | ASN A 377 | -1.225 | 27.878 | 55.088 | 1.00 | 20.81 | N |
| ATOM | 2438 | CA | ASN A 377 | -1.513 | 29.200 | 54.614 | 1.00 | 21.04 | C |
| ATOM | 2440 | CB | ASN A 377 | -1.989 | 29.136 | 53.153 | 1.00 | 21.22 | C |
| ATOM | 2443 | CG | ASN A 377 | -2.338 | 30.505 | 52.598 | 1.00 | 22.27 | C |
| ATOM | 2444 | OD1 | ASN A 377 | -3.408 | 31.081 | 52.914 | 1.00 | 24.56 | O |
| ATOM | 2445 | ND2 | ASN A 377 | -1.448 | 31.043 | 51.798 | 1.00 | 20.25 | N |
| ATOM | 2448 | C | ASN A 377 | -2.541 | 29.862 | 55.512 | 1.00 | 20.84 | C |
| ATOM | 2449 | O | ASN A 377 | -2.489 | 31.089 | 55.740 | 1.00 | 20.38 | O |
| ATOM | 2450 | N | ILE A 378 | -3.462 | 29.053 | 56.034 | 1.00 | 21.08 | N |
| ATOM | 2452 | CA | ILE A 378 | -4.529 | 29.562 | 56.892 | 1.00 | 21.21 | C |
| ATOM | 2454 | CB | ILE A 378 | -5.634 | 28.531 | 57.127 | 1.00 | 21.70 | C |
| ATOM | 2456 | CG1 | ILE A 378 | -6.486 | 28.327 | 55.853 | 1.00 | 20.73 | C |
| ATOM | 2459 | CD1 | ILE A 378 | -7.264 | 27.065 | 55.878 | 1.00 | 19.57 | C |
| ATOM | 2463 | CG2 | ILE A 378 | -6.544 | 28.984 | 58.301 | 1.00 | 22.97 | C |
| ATOM | 2467 | C | ILE A 378 | -3.961 | 30.003 | 58.203 | 1.00 | 21.49 | C |
| ATOM | 2468 | O | ILE A 378 | -4.394 | 31.034 | 58.713 | 1.00 | 21.85 | O |
| ATOM | 2469 | N | PHE A 379 | -2.974 | 29.263 | 58.733 | 1.00 | 21.69 | N |
| ATOM | 2471 | CA | PHE A 379 | -2.409 | 29.556 | 60.067 | 1.00 | 21.80 | C |
| ATOM | 2473 | CB | PHE A 379 | -2.147 | 28.276 | 60.911 | 1.00 | 21.76 | C |
| ATOM | 2476 | CG | PHE A 379 | -3.395 | 27.467 | 61.220 | 1.00 | 20.36 | C |
| ATOM | 2477 | CD1 | PHE A 379 | -3.511 | 26.143 | 60.786 | 1.00 | 18.89 | C |
| ATOM | 2479 | CE1 | PHE A 379 | -4.645 | 25.422 | 61.064 | 1.00 | 19.73 | C |
| ATOM | 2481 | CZ | PHE A 379 | -5.682 | 25.999 | 61.769 | 1.00 | 18.74 | C |
| ATOM | 2483 | CE2 | PHE A 379 | -5.569 | 27.309 | 62.205 | 1.00 | 19.76 | C |
| ATOM | 2485 | CD2 | PHE A 379 | -4.436 | 28.028 | 61.937 | 1.00 | 18.90 | C |
| ATOM | 2487 | C | PHE A 379 | -1.139 | 30.352 | 59.931 | 1.00 | 22.55 | C |
| ATOM | 2488 | O | PHE A 379 | -0.090 | 29.996 | 60.482 | 1.00 | 22.46 | O |
| ATOM | 2489 | N | SER A 380 | -1.243 | 31.458 | 59.209 | 1.00 | 23.76 | N |
| ATOM | 2491 | CA | SER A 380 | -0.127 | 32.382 | 59.072 | 1.00 | 24.35 | C |
| ATOM | 2493 | CB | SER A 380 | -0.124 | 33.029 | 57.692 | 1.00 | 24.13 | C |
| ATOM | 2496 | OG | SER A 380 | -0.345 | 32.064 | 56.683 | 1.00 | 23.05 | O |
| ATOM | 2498 | C | SER A 380 | -0.309 | 33.418 | 60.160 | 1.00 | 25.51 | C |
| ATOM | 2499 | O | SER A 380 | -1.213 | 34.264 | 60.083 | 1.00 | 26.09 | O |
| ATOM | 2500 | N | ALA A 381 | 0.531 | 33.340 | 61.188 | 1.00 | 26.69 | N |
| ATOM | 2502 | CA | ALA A 381 | 0.394 | 34.212 | 62.362 | 1.00 | 27.65 | C |
| ATOM | 2504 | CB | ALA A 381 | 1.430 | 33.806 | 63.463 | 1.00 | 27.30 | C |
| ATOM | 2508 | C | ALA A 381 | 0.475 | 35.749 | 62.051 | 1.00 | 28.30 | C |
| ATOM | 2509 | O | ALA A 381 | 0.037 | 36.573 | 62.889 | 1.00 | 28.65 | O |
| ATOM | 2510 | N | ASP A 382 | 0.996 | 36.122 | 60.867 | 1.00 | 28.16 | N |
| ATOM | 2512 | CA | ASP A 382 | 1.318 | 37.531 | 60.572 | 1.00 | 28.54 | C |
| ATOM | 2514 | CB | ASP A 382 | 2.667 | 37.575 | 59.922 | 1.00 | 28.78 | C |
| ATOM | 2517 | CG | ASP A 382 | 2.584 | 37.247 | 58.492 | 1.00 | 29.48 | C |

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| ATOM | 2518 | OD1 | ASP | A | 382 | 2.104 | 36.136 | 58.165 | 1.00 | 26.57 | O |
| ATOM | 2519 | OD2 | ASP | A | 382 | 2.930 | 38.082 | 57.641 | 1.00 | 34.31 | O |
| ATOM | 2520 | C | ASP | A | 382 | 0.313 | 38.290 | 59.662 | 1.00 | 28.41 | C |
| ATOM | 2521 | O | ASP | A | 382 | 0.647 | 39.262 | 58.988 | 1.00 | 29.03 | O |
| ATOM | 2522 | N | ARG | A | 383 | -0.926 | 37.830 | 59.647 | 1.00 | 27.87 | N |
| ATOM | 2524 | CA | ARG | A | 383 | -1.977 | 38.477 | 58.903 | 1.00 | 26.83 | C |
| ATOM | 2526 | CB | ARG | A | 383 | -3.180 | 37.536 | 58.794 | 1.00 | 26.90 | C |
| ATOM | 2529 | CG | ARG | A | 383 | -2.886 | 36.172 | 58.168 | 1.00 | 24.71 | C |
| ATOM | 2532 | CD | ARG | A | 383 | -2.247 | 36.284 | 56.835 | 1.00 | 22.46 | C |
| ATOM | 2535 | NE | ARG | A | 383 | -2.429 | 35.078 | 56.039 | 1.00 | 22.63 | N |
| ATOM | 2537 | CZ | ARG | A | 383 | -2.277 | 35.011 | 54.710 | 1.00 | 21.78 | C |
| ATOM | 2538 | NH1 | ARG | A | 383 | -1.911 | 36.096 | 54.033 | 1.00 | 22.59 | N |
| ATOM | 2541 | NH2 | ARG | A | 383 | -2.485 | 33.864 | 54.054 | 1.00 | 20.10 | N |
| ATOM | 2544 | C | ARG | A | 383 | -2.364 | 39.711 | 59.685 | 1.00 | 26.73 | C |
| ATOM | 2545 | O | ARG | A | 383 | -2.115 | 39.785 | 60.871 | 1.00 | 26.44 | O |
| ATOM | 2546 | N | PRO | A | 384 | -2.949 | 40.699 | 59.029 | 1.00 | 26.91 | N |
| ATOM | 2547 | CA | PRO | A | 384 | -3.443 | 41.871 | 59.740 | 1.00 | 26.93 | C |
| ATOM | 2549 | CB | PRO | A | 384 | -4.153 | 42.678 | 58.656 | 1.00 | 26.92 | C |
| ATOM | 2552 | CG | PRO | A | 384 | -3.746 | 42.114 | 57.368 | 1.00 | 26.82 | C |
| ATOM | 2555 | CD | PRO | A | 384 | -3.150 | 40.806 | 57.577 | 1.00 | 27.16 | C |
| ATOM | 2558 | C | PRO | A | 384 | -4.441 | 41.457 | 60.795 | 1.00 | 26.78 | C |
| ATOM | 2559 | O | PRO | A | 384 | -5.121 | 40.441 | 60.606 | 1.00 | 26.63 | O |
| ATOM | 2560 | N | ASN | A | 385 | -4.493 | 42.233 | 61.874 | 1.00 | 26.52 | N |
| ATOM | 2562 | CA | ASN | A | 385 | -5.530 | 42.137 | 62.905 | 1.00 | 26.44 | C |
| ATOM | 2564 | CB | ASN | A | 385 | -6.920 | 42.470 | 62.317 | 1.00 | 26.43 | C |
| ATOM | 2567 | CG | ASN | A | 385 | -7.051 | 43.921 | 61.879 | 1.00 | 25.91 | C |
| ATOM | 2568 | OD1 | ASN | A | 385 | -6.402 | 44.828 | 62.419 | 1.00 | 25.48 | O |
| ATOM | 2569 | ND2 | ASN | A | 385 | -7.913 | 44.148 | 60.907 | 1.00 | 24.36 | N |
| ATOM | 2572 | C | ASN | A | 385 | -5.600 | 40.827 | 63.702 | 1.00 | 26.20 | C |
| ATOM | 2573 | O | ASN | A | 385 | -6.591 | 40.589 | 64.387 | 1.00 | 26.57 | O |
| ATOM | 2574 | N | VAL | A | 386 | -4.553 | 40.007 | 63.661 | 1.00 | 25.70 | N |
| ATOM | 2576 | CA | VAL | A | 386 | -4.521 | 38.785 | 64.451 | 1.00 | 25.44 | C |
| ATOM | 2578 | CB | VAL | A | 386 | -3.567 | 37.770 | 63.833 | 1.00 | 25.52 | C |
| ATOM | 2580 | CG1 | VAL | A | 386 | -3.157 | 36.694 | 64.848 | 1.00 | 26.16 | C |
| ATOM | 2584 | CG2 | VAL | A | 386 | -4.232 | 37.137 | 62.635 | 1.00 | 25.40 | C |
| ATOM | 2588 | C | VAL | A | 386 | -4.149 | 39.078 | 65.905 | 1.00 | 25.38 | C |
| ATOM | 2589 | O | VAL | A | 386 | -3.061 | 39.545 | 66.197 | 1.00 | 25.07 | O |
| ATOM | 2590 | N | GLN | A | 387 | -5.073 | 38.791 | 66.811 | 1.00 | 25.79 | N |
| ATOM | 2592 | CA | GLN | A | 387 | -4.911 | 39.093 | 68.229 | 1.00 | 26.17 | C |
| ATOM | 2594 | CB | GLN | A | 387 | -6.295 | 39.216 | 68.904 | 1.00 | 26.48 | C |
| ATOM | 2597 | CG | GLN | A | 387 | -7.088 | 40.481 | 68.475 | 1.00 | 28.11 | C |
| ATOM | 2600 | CD | GLN | A | 387 | -8.426 | 40.650 | 69.216 | 1.00 | 31.36 | C |
| ATOM | 2601 | OE1 | GLN | A | 387 | -8.449 | 40.881 | 70.443 | 1.00 | 31.98 | O |
| ATOM | 2602 | NE2 | GLN | A | 387 | -9.542 | 40.555 | 68.471 | 1.00 | 32.05 | N |
| ATOM | 2605 | C | GLN | A | 387 | -4.007 | 38.089 | 68.953 | 1.00 | 25.93 | C |
| ATOM | 2606 | O | GLN | A | 387 | -3.273 | 38.469 | 69.861 | 1.00 | 25.80 | O |
| ATOM | 2607 | N | GLU | A | 388 | -4.033 | 36.827 | 68.517 | 1.00 | 25.99 | N |
| ATOM | 2609 | CA | GLU | A | 388 | -3.272 | 35.729 | 69.146 | 1.00 | 26.03 | C |

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ATOM   2611  CB  GLU A 388    -4.235 34.652 69.672 1.00 26.23      C
ATOM   2614  CG  GLU A 388    -5.309 35.179 70.609 1.00 27.00      C
ATOM   2617  CD  GLU A 388    -5.828 34.133 71.581 1.00 28.08      C
ATOM   2618  OE1 GLU A 388    -6.191 33.011 71.159 1.00 28.82      O
ATOM   2619  OE2 GLU A 388    -5.901 34.448 72.780 1.00 29.76      O
ATOM   2620  C   GLU A 388    -2.269 35.065 68.192 1.00 25.65      C
ATOM   2621  O   GLU A 388    -2.452 33.901 67.811 1.00 25.73      O
ATOM   2622  N   PRO A 389    -1.220 35.789 67.800 1.00 25.08      N
ATOM   2623  CA  PRO A 389    -0.245 35.269 66.836 1.00 24.68      C
ATOM   2625  CB  PRO A 389     0.675 36.475 66.599 1.00 24.77      C
ATOM   2628  CG  PRO A 389     0.514 37.324 67.759 1.00 24.58      C
ATOM   2631  CD  PRO A 389    -0.897 37.167 68.208 1.00 24.91      C
ATOM   2634  C   PRO A 389     0.559 34.059 67.322 1.00 24.43      C
ATOM   2635  O   PRO A 389     0.934 33.206 66.520 1.00 24.28      O
ATOM   2636  N   GLY A 390     0.835 34.001 68.620 1.00 24.41      N
ATOM   2638  CA  GLY A 390     1.469 32.842 69.227 1.00 24.29      C
ATOM   2641  C   GLY A 390     0.642 31.565 69.086 1.00 24.54      C
ATOM   2642  O   GLY A 390     1.192 30.507 68.758 1.00 24.52      O
ATOM   2643  N   ARG A 391    -0.674 31.649 69.311 1.00 24.39      N
ATOM   2645  CA  ARG A 391    -1.537 30.480 69.177 1.00 24.60      C
ATOM   2647  CB  ARG A 391    -2.937 30.728 69.739 1.00 24.91      C
ATOM   2650  CG  ARG A 391    -2.931 31.219 71.174 1.00 28.18      C
ATOM   2653  CD  ARG A 391    -4.110 30.745 72.041 1.00 32.93      C
ATOM   2656  NE  ARG A 391    -5.295 30.355 71.260 1.00 36.71      N
ATOM   2658  CZ  ARG A 391    -5.933 29.178 71.363 1.00 41.04      C
ATOM   2659  NH1 ARG A 391    -5.504 28.232 72.215 1.00 43.07      N
ATOM   2662  NH2 ARG A 391    -7.015 28.936 70.607 1.00 40.78      N
ATOM   2665  C   ARG A 391    -1.640 30.049 67.726 1.00 24.04      C
ATOM   2666  O   ARG A 391    -1.743 28.855 67.445 1.00 24.57      O
ATOM   2667  N   VAL A 392    -1.610 31.004 66.802 1.00 23.34      N
ATOM   2669  CA  VAL A 392    -1.699 30.675 65.385 1.00 22.50      C
ATOM   2671  CB  VAL A 392    -2.007 31.906 64.539 1.00 22.35      C
ATOM   2673  CG1 VAL A 392    -1.875 31.590 63.059 1.00 21.93      C
ATOM   2677  CG2 VAL A 392    -3.413 32.420 64.865 1.00 22.07      C
ATOM   2681  C   VAL A 392    -0.410 30.014 64.928 1.00 22.29      C
ATOM   2682  O   VAL A 392    -0.459 29.037 64.197 1.00 22.06      O
ATOM   2683  N   GLU A 393     0.741 30.505 65.375 1.00 22.38      N
ATOM   2685  CA  GLU A 393     2.000 29.902 64.929 1.00 23.18      C
ATOM   2687  CB  GLU A 393     3.233 30.735 65.318 1.00 23.56      C
ATOM   2690  CG  GLU A 393     4.539 30.125 64.805 1.00 24.92      C
ATOM   2693  CD  GLU A 393     5.749 31.038 64.954 1.00 27.27      C
ATOM   2694  OE1 GLU A 393     6.631 31.069 64.069 1.00 30.57      O
ATOM   2695  OE2 GLU A 393     5.849 31.703 65.977 1.00 30.03      O
ATOM   2696  C   GLU A 393     2.160 28.460 65.429 1.00 23.15      C
ATOM   2697  O   GLU A 393     2.738 27.617 64.729 1.00 23.90      O
ATOM   2698  N   ALA A 394     1.640 28.177 66.623 1.00 22.56      N
ATOM   2700  CA  ALA A 394     1.704 26.839 67.180 1.00 21.86      C
ATOM   2702  CB  ALA A 394     1.337 26.847 68.667 1.00 21.66      C
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| ATOM | 2706 | C | ALA A 394 | 0.794 | 25.919 | 66.389 | 1.00 | 21.49 | C |
|------|------|------|-----------|-------|--------|--------|------|-------|---|
| ATOM | 2707 | O | ALA A 394 | 1.110 | 24.758 | 66.206 | 1.00 | 20.85 | O |
| ATOM | 2708 | N | LEU A 395 | -0.344 | 26.425 | 65.915 | 1.00 | 21.67 | N |
| ATOM | 2710 | CA | LEU A 395 | -1.212 | 25.612 | 65.037 | 1.00 | 21.93 | C |
| ATOM | 2712 | CB | LEU A 395 | -2.577 | 26.268 | 64.833 | 1.00 | 22.07 | C |
| ATOM | 2715 | CG | LEU A 395 | -3.454 | 26.406 | 66.085 | 1.00 | 23.60 | C |
| ATOM | 2717 | CD1 | LEU A 395 | -4.753 | 27.161 | 65.747 | 1.00 | 23.46 | C |
| ATOM | 2721 | CD2 | LEU A 395 | -3.770 | 25.073 | 66.709 | 1.00 | 24.27 | C |
| ATOM | 2725 | C | LEU A 395 | -0.548 | 25.304 | 63.672 | 1.00 | 21.30 | C |
| ATOM | 2726 | O | LEU A 395 | -0.693 | 24.209 | 63.134 | 1.00 | 20.06 | O |
| ATOM | 2727 | N | GLN A 396 | 0.208 | 26.256 | 63.145 | 1.00 | 21.27 | N |
| ATOM | 2729 | CA | GLN A 396 | 0.908 | 26.020 | 61.893 | 1.00 | 21.75 | C |
| ATOM | 2731 | CB | GLN A 396 | 1.681 | 27.246 | 61.426 | 1.00 | 21.90 | C |
| ATOM | 2734 | CG | GLN A 396 | 1.919 | 27.177 | 59.945 | 1.00 | 21.80 | C |
| ATOM | 2737 | CD | GLN A 396 | 2.598 | 28.386 | 59.409 | 1.00 | 21.70 | C |
| ATOM | 2738 | OE1 | GLN A 396 | 2.052 | 29.057 | 58.532 | 1.00 | 24.11 | O |
| ATOM | 2739 | NE2 | GLN A 396 | 3.787 | 28.674 | 59.903 | 1.00 | 19.79 | N |
| ATOM | 2742 | C | GLN A 396 | 1.878 | 24.871 | 61.995 | 1.00 | 21.52 | C |
| ATOM | 2743 | O | GLN A 396 | 1.908 | 23.996 | 61.128 | 1.00 | 21.54 | O |
| ATOM | 2744 | N | GLN A 397 | 2.641 | 24.879 | 63.080 | 1.00 | 21.23 | N |
| ATOM | 2746 | CA | GLN A 397 | 3.788 | 23.997 | 63.248 | 1.00 | 21.05 | C |
| ATOM | 2748 | CB | GLN A 397 | 4.347 | 24.082 | 64.680 | 1.00 | 21.37 | C |
| ATOM | 2751 | CG | GLN A 397 | 5.532 | 23.159 | 64.942 | 1.00 | 24.36 | C |
| ATOM | 2754 | CD | GLN A 397 | 6.140 | 23.289 | 66.353 | 1.00 | 28.63 | C |
| ATOM | 2755 | OE1 | GLN A 397 | 6.069 | 24.359 | 66.995 | 1.00 | 30.75 | O |
| ATOM | 2756 | NE2 | GLN A 397 | 6.758 | 22.198 | 66.827 | 1.00 | 29.08 | N |
| ATOM | 2759 | C | GLN A 397 | 3.538 | 22.563 | 62.834 | 1.00 | 19.99 | C |
| ATOM | 2760 | O | GLN A 397 | 4.297 | 22.055 | 62.042 | 1.00 | 19.80 | O |
| ATOM | 2761 | N | PRO A 398 | 2.528 | 21.894 | 63.383 | 1.00 | 19.52 | N |
| ATOM | 2762 | CA | PRO A 398 | 2.304 | 20.475 | 63.055 | 1.00 | 19.27 | C |
| ATOM | 2764 | CB | PRO A 398 | 1.093 | 20.046 | 63.932 | 1.00 | 18.97 | C |
| ATOM | 2767 | CG | PRO A 398 | 0.577 | 21.261 | 64.580 | 1.00 | 19.38 | C |
| ATOM | 2770 | CD | PRO A 398 | 1.579 | 22.373 | 64.401 | 1.00 | 19.53 | C |
| ATOM | 2773 | C | PRO A 398 | 2.017 | 20.226 | 61.599 | 1.00 | 18.62 | C |
| ATOM | 2774 | O | PRO A 398 | 2.396 | 19.166 | 61.131 | 1.00 | 18.35 | O |
| ATOM | 2775 | N | TYR A 399 | 1.362 | 21.149 | 60.913 | 1.00 | 18.36 | N |
| ATOM | 2777 | CA | TYR A 399 | 1.100 | 20.973 | 59.479 | 1.00 | 19.20 | C |
| ATOM | 2779 | CB | TYR A 399 | 0.005 | 21.966 | 59.000 | 1.00 | 19.17 | C |
| ATOM | 2782 | CG | TYR A 399 | -1.355 | 21.732 | 59.618 | 1.00 | 18.45 | C |
| ATOM | 2783 | CD1 | TYR A 399 | -1.829 | 22.549 | 60.636 | 1.00 | 18.83 | C |
| ATOM | 2785 | CE1 | TYR A 399 | -3.057 | 22.320 | 61.232 | 1.00 | 17.80 | C |
| ATOM | 2787 | CZ | TYR A 399 | -3.841 | 21.272 | 60.800 | 1.00 | 18.18 | C |
| ATOM | 2788 | OH | TYR A 399 | -5.081 | 21.058 | 61.386 | 1.00 | 19.70 | O |
| ATOM | 2790 | CE2 | TYR A 399 | -3.391 | 20.443 | 59.796 | 1.00 | 17.70 | C |
| ATOM | 2792 | CD2 | TYR A 399 | -2.153 | 20.671 | 59.218 | 1.00 | 18.99 | C |
| ATOM | 2794 | C | TYR A 399 | 2.412 | 21.095 | 58.637 | 1.00 | 19.46 | C |
| ATOM | 2795 | O | TYR A 399 | 2.678 | 20.332 | 57.704 | 1.00 | 19.29 | O |
| ATOM | 2796 | N | VAL A 400 | 3.248 | 22.051 | 58.999 | 1.00 | 20.04 | N |

| ATOM | 2798 | CA  | VAL | A | 400 | 4.576 | 22.150 | 58.401 | 1.00 | 20.23 | C |
|------|------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 2800 | CB  | VAL | A | 400 | 5.335 | 23.373 | 58.923 | 1.00 | 19.99 | C |
| ATOM | 2802 | CG1 | VAL | A | 400 | 6.693 | 23.459 | 58.264 | 1.00 | 20.63 | C |
| ATOM | 2806 | CG2 | VAL | A | 400 | 4.545 | 24.631 | 58.611 | 1.00 | 18.88 | C |
| ATOM | 2810 | C   | VAL | A | 400 | 5.356 | 20.856 | 58.610 | 1.00 | 20.10 | C |
| ATOM | 2811 | O   | VAL | A | 400 | 5.874 | 20.301 | 57.662 | 1.00 | 19.94 | O |
| ATOM | 2812 | N   | GLU | A | 401 | 5.385 | 20.383 | 59.851 | 1.00 | 20.78 | N |
| ATOM | 2814 | CA  | GLU | A | 401 | 5.907 | 19.053 | 60.237 | 1.00 | 21.23 | C |
| ATOM | 2816 | CB  | GLU | A | 401 | 5.662 | 18.795 | 61.744 | 1.00 | 21.63 | C |
| ATOM | 2819 | CG  | GLU | A | 401 | 6.803 | 19.248 | 62.663 | 1.00 | 24.26 | C |
| ATOM | 2822 | CD  | GLU | A | 401 | 6.540 | 19.034 | 64.151 | 1.00 | 26.48 | C |
| ATOM | 2823 | OE1 | GLU | A | 401 | 7.129 | 19.744 | 64.999 | 1.00 | 28.12 | O |
| ATOM | 2824 | OE2 | GLU | A | 401 | 5.746 | 18.144 | 64.479 | 1.00 | 29.48 | O |
| ATOM | 2825 | C   | GLU | A | 401 | 5.334 | 17.886 | 59.407 | 1.00 | 20.90 | C |
| ATOM | 2826 | O   | GLU | A | 401 | 6.073 | 17.001 | 58.972 | 1.00 | 20.52 | O |
| ATOM | 2827 | N   | ALA | A | 402 | 4.023 | 17.889 | 59.188 | 1.00 | 20.76 | N |
| ATOM | 2829 | CA  | ALA | A | 402 | 3.365 | 16.817 | 58.442 | 1.00 | 20.68 | C |
| ATOM | 2831 | CB  | ALA | A | 402 | 1.869 | 16.916 | 58.596 | 1.00 | 20.69 | C |
| ATOM | 2835 | C   | ALA | A | 402 | 3.744 | 16.876 | 56.978 | 1.00 | 20.91 | C |
| ATOM | 2836 | O   | ALA | A | 402 | 3.914 | 15.863 | 56.324 | 1.00 | 20.41 | O |
| ATOM | 2837 | N   | LEU | A | 403 | 3.896 | 18.085 | 56.464 | 1.00 | 21.89 | N |
| ATOM | 2839 | CA  | LEU | A | 403 | 4.295 | 18.257 | 55.078 | 1.00 | 22.32 | C |
| ATOM | 2841 | CB  | LEU | A | 403 | 4.143 | 19.707 | 54.644 | 1.00 | 22.16 | C |
| ATOM | 2844 | CG  | LEU | A | 403 | 4.369 | 19.853 | 53.144 | 1.00 | 21.61 | C |
| ATOM | 2846 | CD1 | LEU | A | 403 | 3.587 | 18.856 | 52.322 | 1.00 | 20.69 | C |
| ATOM | 2850 | CD2 | LEU | A | 403 | 3.947 | 21.218 | 52.799 | 1.00 | 22.87 | C |
| ATOM | 2854 | C   | LEU | A | 403 | 5.733 | 17.827 | 54.892 | 1.00 | 22.58 | C |
| ATOM | 2855 | O   | LEU | A | 403 | 6.058 | 17.156 | 53.943 | 1.00 | 22.65 | O |
| ATOM | 2856 | N   | LEU | A | 404 | 6.578 | 18.222 | 55.831 | 1.00 | 22.95 | N |
| ATOM | 2858 | CA  | LEU | A | 404 | 7.988 | 17.888 | 55.804 | 1.00 | 23.22 | C |
| ATOM | 2860 | CB  | LEU | A | 404 | 8.680 | 18.526 | 57.003 | 1.00 | 23.73 | C |
| ATOM | 2863 | CG  | LEU | A | 404 | 10.167 | 18.248 | 57.246 | 1.00 | 25.22 | C |
| ATOM | 2865 | CD1 | LEU | A | 404 | 10.988 | 18.355 | 55.960 | 1.00 | 26.22 | C |
| ATOM | 2869 | CD2 | LEU | A | 404 | 10.661 | 19.235 | 58.317 | 1.00 | 25.99 | C |
| ATOM | 2873 | C   | LEU | A | 404 | 8.186 | 16.389 | 55.807 | 1.00 | 22.91 | C |
| ATOM | 2874 | O   | LEU | A | 404 | 8.788 | 15.852 | 54.905 | 1.00 | 23.02 | O |
| ATOM | 2875 | N   | SER | A | 405 | 7.683 | 15.710 | 56.825 | 1.00 | 23.04 | N |
| ATOM | 2877 | CA  | SER | A | 405 | 7.651 | 14.251 | 56.821 | 1.00 | 23.28 | C |
| ATOM | 2879 | CB  | SER | A | 405 | 6.783 | 13.714 | 57.965 | 1.00 | 23.37 | C |
| ATOM | 2882 | OG  | SER | A | 405 | 7.253 | 14.169 | 59.216 | 1.00 | 25.09 | O |
| ATOM | 2884 | C   | SER | A | 405 | 7.110 | 13.688 | 55.498 | 1.00 | 23.06 | C |
| ATOM | 2885 | O   | SER | A | 405 | 7.705 | 12.763 | 54.935 | 1.00 | 22.72 | O |
| ATOM | 2886 | N   | TYR | A | 406 | 5.997 | 14.249 | 55.006 | 1.00 | 22.61 | N |
| ATOM | 2888 | CA  | TYR | A | 406 | 5.317 | 13.678 | 53.848 | 1.00 | 22.23 | C |
| ATOM | 2890 | CB  | TYR | A | 406 | 3.977 | 14.351 | 53.587 | 1.00 | 22.04 | C |
| ATOM | 2893 | CG  | TYR | A | 406 | 3.146 | 13.720 | 52.472 | 1.00 | 21.34 | C |
| ATOM | 2894 | CD1 | TYR | A | 406 | 2.099 | 12.831 | 52.747 | 1.00 | 20.83 | C |
| ATOM | 2896 | CE1 | TYR | A | 406 | 1.331 | 12.293 | 51.734 | 1.00 | 18.73 | C |

| ATOM | 2898 | CZ | TYR | A | 406 | 1.620 | 12.628 | 50.449 | 1.00 | 19.07 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2899 | OH | TYR | A | 406 | 0.919 | 12.123 | 49.410 | 1.00 | 19.33 | O |
| ATOM | 2901 | CE2 | TYR | A | 406 | 2.631 | 13.484 | 50.154 | 1.00 | 20.65 | C |
| ATOM | 2903 | CD2 | TYR | A | 406 | 3.380 | 14.035 | 51.155 | 1.00 | 20.77 | C |
| ATOM | 2905 | C | TYR | A | 406 | 6.178 | 13.752 | 52.607 | 1.00 | 22.21 | C |
| ATOM | 2906 | O | TYR | A | 406 | 6.249 | 12.785 | 51.862 | 1.00 | 22.49 | O |
| ATOM | 2907 | N | THR | A | 407 | 6.837 | 14.885 | 52.396 | 1.00 | 22.35 | N |
| ATOM | 2909 | CA | THR | A | 407 | 7.634 | 15.110 | 51.190 | 1.00 | 22.78 | C |
| ATOM | 2911 | CB | THR | A | 407 | 7.900 | 16.620 | 50.935 | 1.00 | 22.45 | C |
| ATOM | 2913 | OG1 | THR | A | 407 | 8.488 | 17.222 | 52.080 | 1.00 | 21.50 | O |
| ATOM | 2915 | CG2 | THR | A | 407 | 6.593 | 17.407 | 50.770 | 1.00 | 22.13 | C |
| ATOM | 2919 | C | THR | A | 407 | 8.932 | 14.351 | 51.263 | 1.00 | 23.93 | C |
| ATOM | 2920 | O | THR | A | 407 | 9.482 | 13.979 | 50.241 | 1.00 | 23.74 | O |
| ATOM | 2921 | N | ARG | A | 408 | 9.405 | 14.112 | 52.480 | 1.00 | 25.87 | N |
| ATOM | 2923 | CA | ARG | A | 408 | 10.599 | 13.294 | 52.710 | 1.00 | 27.83 | C |
| ATOM | 2925 | CB | ARG | A | 408 | 10.933 | 13.250 | 54.213 | 1.00 | 28.51 | C |
| ATOM | 2928 | CG | ARG | A | 408 | 12.394 | 13.539 | 54.562 | 1.00 | 31.44 | C |
| ATOM | 2931 | CD | ARG | A | 408 | 12.882 | 12.825 | 55.833 | 1.00 | 35.67 | C |
| ATOM | 2934 | NE | ARG | A | 408 | 14.329 | 12.997 | 56.069 | 1.00 | 39.51 | N |
| ATOM | 2936 | CZ | ARG | A | 408 | 14.903 | 14.064 | 56.646 | 1.00 | 41.72 | C |
| ATOM | 2937 | NH1 | ARG | A | 408 | 14.166 | 15.110 | 57.068 | 1.00 | 43.38 | N |
| ATOM | 2940 | NH2 | ARG | A | 408 | 16.227 | 14.090 | 56.794 | 1.00 | 40.97 | N |
| ATOM | 2943 | C | ARG | A | 408 | 10.376 | 11.867 | 52.188 | 1.00 | 28.38 | C |
| ATOM | 2944 | O | ARG | A | 408 | 11.152 | 11.347 | 51.398 | 1.00 | 28.05 | O |
| ATOM | 2945 | N | ILE | A | 409 | 9.281 | 11.268 | 52.642 | 1.00 | 29.53 | N |
| ATOM | 2947 | CA | ILE | A | 409 | 8.872 | 9.924 | 52.265 | 1.00 | 30.35 | C |
| ATOM | 2949 | CB | ILE | A | 409 | 7.666 | 9.467 | 53.175 | 1.00 | 30.47 | C |
| ATOM | 2951 | CG1 | ILE | A | 409 | 8.186 | 8.932 | 54.520 | 1.00 | 31.08 | C |
| ATOM | 2954 | CD1 | ILE | A | 409 | 7.398 | 9.410 | 55.744 | 1.00 | 31.67 | C |
| ATOM | 2958 | CG2 | ILE | A | 409 | 6.795 | 8.411 | 52.500 | 1.00 | 30.57 | C |
| ATOM | 2962 | C | ILE | A | 409 | 8.557 | 9.837 | 50.761 | 1.00 | 31.14 | C |
| ATOM | 2963 | O | ILE | A | 409 | 9.217 | 9.071 | 50.071 | 1.00 | 31.25 | O |
| ATOM | 2964 | N | LYS | A | 410 | 7.589 | 10.624 | 50.259 | 1.00 | 32.00 | N |
| ATOM | 2966 | CA | LYS | A | 410 | 7.123 | 10.541 | 48.850 | 1.00 | 32.62 | C |
| ATOM | 2968 | CB | LYS | A | 410 | 6.127 | 11.667 | 48.526 | 1.00 | 32.88 | C |
| ATOM | 2971 | CG | LYS | A | 410 | 5.514 | 11.602 | 47.095 | 1.00 | 33.17 | C |
| ATOM | 2974 | CD | LYS | A | 410 | 4.444 | 12.698 | 46.841 | 1.00 | 33.49 | C |
| ATOM | 2977 | CE | LYS | A | 410 | 4.438 | 13.174 | 45.378 | 1.00 | 33.29 | C |
| ATOM | 2980 | NZ | LYS | A | 410 | 3.211 | 13.935 | 45.003 | 1.00 | 32.16 | N |
| ATOM | 2984 | C | LYS | A | 410 | 8.273 | 10.609 | 47.841 | 1.00 | 33.12 | C |
| ATOM | 2985 | O | LYS | A | 410 | 8.434 | 9.725 | 46.983 | 1.00 | 33.01 | O |
| ATOM | 2986 | N | ARG | A | 411 | 9.053 | 11.679 | 47.948 | 1.00 | 33.44 | N |
| ATOM | 2988 | CA | ARG | A | 411 | 10.242 | 11.862 | 47.136 | 1.00 | 33.71 | C |
| ATOM | 2990 | CB | ARG | A | 411 | 10.072 | 13.060 | 46.168 | 1.00 | 34.06 | C |
| ATOM | 2993 | CG | ARG | A | 411 | 8.655 | 13.228 | 45.502 | 1.00 | 35.84 | C |
| ATOM | 2996 | CD | ARG | A | 411 | 8.454 | 12.449 | 44.177 | 1.00 | 38.37 | C |
| ATOM | 2999 | NE | ARG | A | 411 | 7.134 | 12.657 | 43.528 | 1.00 | 40.21 | N |
| ATOM | 3001 | CZ | ARG | A | 411 | 6.559 | 11.815 | 42.631 | 1.00 | 40.45 | C |

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ATOM   3002 NH1 ARG A 411      7.155 10.684 42.253 1.00 40.72        N
ATOM   3005 NH2 ARG A 411      5.373 12.106 42.103 1.00 39.93        N
ATOM   3008 C   ARG A 411     11.444 12.014 48.097 1.00 33.34        C
ATOM   3009 O   ARG A 411     11.789 13.111 48.527 1.00 33.43        O
ATOM   3010 N   PRO A 412     12.056 10.898 48.466 1.00 33.09        N
ATOM   3011 CA  PRO A 412     13.202 10.927 49.385 1.00 33.19        C
ATOM   3013 CB  PRO A 412     13.501  9.432 49.658 1.00 33.32        C
ATOM   3016 CG  PRO A 412     12.716  8.619 48.647 1.00 33.16        C
ATOM   3019 CD  PRO A 412     11.714  9.535 48.021 1.00 33.23        C
ATOM   3022 C   PRO A 412     14.437 11.621 48.813 1.00 33.22        C
ATOM   3023 O   PRO A 412     15.207 12.229 49.575 1.00 33.03        O
ATOM   3024 N   GLN A 413     14.607 11.535 47.493 1.00 33.27        N
ATOM   3026 CA  GLN A 413     15.813 12.018 46.816 1.00 33.09        C
ATOM   3028 CB  GLN A 413     16.368 10.897 45.909 1.00 33.13        C
ATOM   3031 CG  GLN A 413     17.255  9.849 46.660 1.00 33.32        C
ATOM   3034 CD  GLN A 413     16.721  8.408 46.605 1.00 33.28        C
ATOM   3035 OE1 GLN A 413     15.538  8.160 46.850 1.00 33.33        O
ATOM   3036 NE2 GLN A 413     17.601  7.463 46.295 1.00 32.31        N
ATOM   3039 C   GLN A 413     15.544 13.340 46.054 1.00 32.88        C
ATOM   3040 O   GLN A 413     16.138 13.603 45.005 1.00 32.60        O
ATOM   3041 N   ASP A 414     14.645 14.161 46.612 1.00 32.60        N
ATOM   3043 CA  ASP A 414     14.329 15.503 46.099 1.00 32.36        C
ATOM   3045 CB  ASP A 414     13.086 15.429 45.214 1.00 32.54        C
ATOM   3048 CG  ASP A 414     12.688 16.774 44.593 1.00 33.50        C
ATOM   3049 OD1 ASP A 414     13.470 17.767 44.614 1.00 33.77        O
ATOM   3050 OD2 ASP A 414     11.566 16.899 44.048 1.00 34.43        O
ATOM   3051 C   ASP A 414     14.136 16.463 47.295 1.00 31.92        C
ATOM   3052 O   ASP A 414     13.025 16.679 47.774 1.00 31.71        O
ATOM   3053 N   GLN A 415     15.249 17.024 47.766 1.00 31.57        N
ATOM   3055 CA  GLN A 415     15.298 17.798 49.011 1.00 31.04        C
ATOM   3057 CB  GLN A 415     16.736 17.897 49.508 1.00 31.40        C
ATOM   3060 CG  GLN A 415     17.240 16.632 50.162 1.00 32.60        C
ATOM   3063 CD  GLN A 415     18.712 16.677 50.389 1.00 33.34        C
ATOM   3064 OE1 GLN A 415     19.190 17.423 51.249 1.00 34.47        O
ATOM   3065 NE2 GLN A 415     19.450 15.903 49.607 1.00 34.47        N
ATOM   3068 C   GLN A 415     14.771 19.203 48.848 1.00 30.16        C
ATOM   3069 O   GLN A 415     14.345 19.817 49.821 1.00 29.98        O
ATOM   3070 N   LEU A 416     14.820 19.722 47.626 1.00 29.18        N
ATOM   3072 CA  LEU A 416     14.357 21.082 47.378 1.00 28.42        C
ATOM   3074 CB  LEU A 416     15.154 21.726 46.236 1.00 28.17        C
ATOM   3077 CG  LEU A 416     16.586 22.199 46.523 1.00 27.41        C
ATOM   3079 CD1 LEU A 416     16.934 23.258 45.535 1.00 27.48        C
ATOM   3083 CD2 LEU A 416     16.809 22.721 47.931 1.00 26.83        C
ATOM   3087 C   LEU A 416     12.850 21.174 47.110 1.00 27.89        C
ATOM   3088 O   LEU A 416     12.302 22.268 47.082 1.00 27.47        O
ATOM   3089 N   ARG A 417     12.191 20.037 46.920 1.00 27.59        N
ATOM   3091 CA  ARG A 417     10.733 20.005 46.738 1.00 27.42        C
ATOM   3093 CB  ARG A 417     10.239 18.536 46.727 1.00 27.61        C
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| ATOM | 3096 | CG | ARG A 417 | 8.781 | 18.282 | 47.141 | 1.00 | 29.03 | C |
|------|------|-----|-----------|-------|--------|--------|------|-------|---|
| ATOM | 3099 | CD | ARG A 417 | 8.283 | 16.833 | 46.853 | 1.00 | 30.11 | C |
| ATOM | 3102 | NE | ARG A 417 | 6.873 | 16.775 | 46.418 | 1.00 | 30.60 | N |
| ATOM | 3104 | CZ | ARG A 417 | 6.426 | 17.204 | 45.230 | 1.00 | 30.36 | C |
| ATOM | 3105 | NH1 | ARG A 417 | 7.270 | 17.711 | 44.330 | 1.00 | 30.42 | N |
| ATOM | 3108 | NH2 | ARG A 417 | 5.132 | 17.105 | 44.929 | 1.00 | 29.49 | N |
| ATOM | 3111 | C | ARG A 417 | 10.026 | 20.853 | 47.815 | 1.00 | 26.58 | C |
| ATOM | 3112 | O | ARG A 417 | 9.287 | 21.793 | 47.518 | 1.00 | 26.04 | O |
| ATOM | 3113 | N | PHE A 418 | 10.294 | 20.540 | 49.068 | 1.00 | 26.04 | N |
| ATOM | 3115 | CA | PHE A 418 | 9.607 | 21.200 | 50.171 | 1.00 | 25.76 | C |
| ATOM | 3117 | CB | PHE A 418 | 9.929 | 20.450 | 51.455 | 1.00 | 26.07 | C |
| ATOM | 3120 | CG | PHE A 418 | 9.361 | 21.061 | 52.676 | 1.00 | 27.39 | C |
| ATOM | 3121 | CD1 | PHE A 418 | 8.010 | 21.270 | 52.791 | 1.00 | 29.73 | C |
| ATOM | 3123 | CE1 | PHE A 418 | 7.471 | 21.816 | 53.944 | 1.00 | 30.72 | C |
| ATOM | 3125 | CZ | PHE A 418 | 8.288 | 22.139 | 54.973 | 1.00 | 31.57 | C |
| ATOM | 3127 | CE2 | PHE A 418 | 9.656 | 21.926 | 54.861 | 1.00 | 32.00 | C |
| ATOM | 3129 | CD2 | PHE A 418 | 10.178 | 21.391 | 53.727 | 1.00 | 29.91 | C |
| ATOM | 3131 | C | PHE A 418 | 9.893 | 22.723 | 50.269 | 1.00 | 24.73 | C |
| ATOM | 3132 | O | PHE A 418 | 8.961 | 23.522 | 50.366 | 1.00 | 24.46 | O |
| ATOM | 3133 | N | PRO A 419 | 11.155 | 23.132 | 50.252 | 1.00 | 23.55 | N |
| ATOM | 3134 | CA | PRO A 419 | 11.468 | 24.556 | 50.127 | 1.00 | 23.35 | C |
| ATOM | 3136 | CB | PRO A 419 | 12.977 | 24.571 | 49.841 | 1.00 | 22.97 | C |
| ATOM | 3139 | CG | PRO A 419 | 13.483 | 23.341 | 50.426 | 1.00 | 22.97 | C |
| ATOM | 3142 | CD | PRO A 419 | 12.372 | 22.320 | 50.405 | 1.00 | 23.54 | C |
| ATOM | 3145 | C | PRO A 419 | 10.708 | 25.219 | 48.981 | 1.00 | 23.25 | C |
| ATOM | 3146 | O | PRO A 419 | 10.217 | 26.313 | 49.196 | 1.00 | 23.56 | O |
| ATOM | 3147 | N | ARG A 420 | 10.601 | 24.572 | 47.819 | 1.00 | 22.88 | N |
| ATOM | 3149 | CA | ARG A 420 | 9.949 | 25.168 | 46.648 | 1.00 | 22.69 | C |
| ATOM | 3151 | CB | ARG A 420 | 10.037 | 24.268 | 45.413 | 1.00 | 23.05 | C |
| ATOM | 3154 | CG | ARG A 420 | 11.344 | 24.320 | 44.644 | 1.00 | 24.92 | C |
| ATOM | 3157 | CD | ARG A 420 | 11.224 | 23.727 | 43.233 | 1.00 | 28.27 | C |
| ATOM | 3160 | NE | ARG A 420 | 12.522 | 23.475 | 42.601 | 1.00 | 31.30 | N |
| ATOM | 3162 | CZ | ARG A 420 | 13.271 | 22.382 | 42.803 | 1.00 | 34.58 | C |
| ATOM | 3163 | NH1 | ARG A 420 | 12.854 | 21.407 | 43.622 | 1.00 | 36.30 | N |
| ATOM | 3166 | NH2 | ARG A 420 | 14.449 | 22.251 | 42.183 | 1.00 | 34.12 | N |
| ATOM | 3169 | C | ARG A 420 | 8.489 | 25.423 | 46.947 | 1.00 | 22.04 | C |
| ATOM | 3170 | O | ARG A 420 | 7.939 | 26.438 | 46.524 | 1.00 | 21.89 | O |
| ATOM | 3171 | N | MET A 421 | 7.856 | 24.504 | 47.675 | 1.00 | 21.52 | N |
| ATOM | 3173 | CA | MET A 421 | 6.450 | 24.666 | 48.046 | 1.00 | 20.91 | C |
| ATOM | 3175 | CB | MET A 421 | 5.937 | 23.429 | 48.739 | 1.00 | 20.70 | C |
| ATOM | 3178 | CG | MET A 421 | 5.634 | 22.299 | 47.798 | 1.00 | 21.02 | C |
| ATOM | 3181 | SD | MET A 421 | 5.218 | 20.786 | 48.673 | 1.00 | 19.95 | S |
| ATOM | 3182 | CE | MET A 421 | 3.780 | 21.239 | 49.263 | 1.00 | 22.45 | C |
| ATOM | 3186 | C | MET A 421 | 6.254 | 25.856 | 48.955 | 1.00 | 20.74 | C |
| ATOM | 3187 | O | MET A 421 | 5.388 | 26.687 | 48.737 | 1.00 | 20.05 | O |
| ATOM | 3188 | N | LEU A 422 | 7.076 | 25.951 | 49.978 | 1.00 | 21.30 | N |
| ATOM | 3190 | CA | LEU A 422 | 6.961 | 27.067 | 50.892 | 1.00 | 21.96 | C |
| ATOM | 3192 | CB | LEU A 422 | 7.972 | 26.920 | 52.048 | 1.00 | 22.35 | C |

| ATOM | 3195 | CG | LEU A 422 | 7.795 | 25.673 | 52.935 | 1.00 | 24.02 | C |
| ATOM | 3197 | CD1 | LEU A 422 | 8.797 | 25.640 | 54.084 | 1.00 | 25.62 | C |
| ATOM | 3201 | CD2 | LEU A 422 | 6.380 | 25.531 | 53.478 | 1.00 | 24.35 | C |
| ATOM | 3205 | C | LEU A 422 | 7.137 | 28.371 | 50.110 | 1.00 | 21.76 | C |
| ATOM | 3206 | O | LEU A 422 | 6.398 | 29.310 | 50.305 | 1.00 | 22.00 | O |
| ATOM | 3207 | N | MET A 423 | 8.078 | 28.408 | 49.175 | 1.00 | 21.60 | N |
| ATOM | 3209 | CA | MET A 423 | 8.351 | 29.627 | 48.411 | 1.00 | 21.63 | C |
| ATOM | 3211 | CB | MET A 423 | 9.532 | 29.401 | 47.463 | 1.00 | 22.48 | C |
| ATOM | 3214 | CG | MET A 423 | 10.871 | 28.989 | 48.161 | 1.00 | 25.15 | C |
| ATOM | 3217 | SD | MET A 423 | 11.977 | 30.338 | 48.557 | 1.00 | 28.49 | S |
| ATOM | 3218 | CE | MET A 423 | 12.949 | 30.359 | 47.182 | 1.00 | 28.75 | C |
| ATOM | 3222 | C | MET A 423 | 7.152 | 30.155 | 47.613 | 1.00 | 20.22 | C |
| ATOM | 3223 | O | MET A 423 | 7.067 | 31.319 | 47.317 | 1.00 | 19.36 | O |
| ATOM | 3224 | N | LYS A 424 | 6.237 | 29.275 | 47.253 | 1.00 | 19.52 | N |
| ATOM | 3226 | CA | LYS A 424 | 4.994 | 29.675 | 46.610 | 1.00 | 18.74 | C |
| ATOM | 3228 | CB | LYS A 424 | 4.270 | 28.457 | 46.040 | 1.00 | 18.77 | C |
| ATOM | 3231 | CG | LYS A 424 | 5.017 | 27.815 | 44.925 | 1.00 | 19.22 | C |
| ATOM | 3234 | CD | LYS A 424 | 5.115 | 28.752 | 43.726 | 1.00 | 21.18 | C |
| ATOM | 3237 | CE | LYS A 424 | 5.767 | 28.077 | 42.502 | 1.00 | 22.94 | C |
| ATOM | 3240 | NZ | LYS A 424 | 6.592 | 29.019 | 41.689 | 1.00 | 24.40 | N |
| ATOM | 3244 | C | LYS A 424 | 4.069 | 30.432 | 47.551 | 1.00 | 17.80 | C |
| ATOM | 3245 | O | LYS A 424 | 3.326 | 31.311 | 47.114 | 1.00 | 16.79 | O |
| ATOM | 3246 | N | LEU A 425 | 4.112 | 30.096 | 48.834 | 1.00 | 16.96 | N |
| ATOM | 3248 | CA | LEU A 425 | 3.452 | 30.940 | 49.842 | 1.00 | 16.90 | C |
| ATOM | 3250 | CB | LEU A 425 | 3.626 | 30.388 | 51.254 | 1.00 | 17.39 | C |
| ATOM | 3253 | CG | LEU A 425 | 3.104 | 28.965 | 51.501 | 1.00 | 18.37 | C |
| ATOM | 3255 | CD1 | LEU A 425 | 3.355 | 28.612 | 52.939 | 1.00 | 19.31 | C |
| ATOM | 3259 | CD2 | LEU A 425 | 1.641 | 28.857 | 51.167 | 1.00 | 19.13 | C |
| ATOM | 3263 | C | LEU A 425 | 3.920 | 32.387 | 49.785 | 1.00 | 15.75 | C |
| ATOM | 3264 | O | LEU A 425 | 3.143 | 33.278 | 49.958 | 1.00 | 15.21 | O |
| ATOM | 3265 | N | VAL A 426 | 5.195 | 32.600 | 49.518 | 1.00 | 15.73 | N |
| ATOM | 3267 | CA | VAL A 426 | 5.727 | 33.944 | 49.299 | 1.00 | 15.53 | C |
| ATOM | 3269 | CB | VAL A 426 | 7.229 | 33.908 | 48.979 | 1.00 | 15.20 | C |
| ATOM | 3271 | CG1 | VAL A 426 | 7.749 | 35.282 | 48.813 | 1.00 | 15.09 | C |
| ATOM | 3275 | CG2 | VAL A 426 | 7.992 | 33.187 | 50.059 | 1.00 | 15.76 | C |
| ATOM | 3279 | C | VAL A 426 | 5.053 | 34.578 | 48.106 | 1.00 | 15.52 | C |
| ATOM | 3280 | O | VAL A 426 | 4.640 | 35.721 | 48.137 | 1.00 | 15.24 | O |
| ATOM | 3281 | N | SER A 427 | 4.988 | 33.810 | 47.030 | 1.00 | 16.02 | N |
| ATOM | 3283 | CA | SER A 427 | 4.421 | 34.275 | 45.781 | 1.00 | 16.14 | C |
| ATOM | 3285 | CB | SER A 427 | 4.534 | 33.173 | 44.720 | 1.00 | 16.06 | C |
| ATOM | 3288 | OG | SER A 427 | 5.854 | 33.124 | 44.199 | 1.00 | 16.93 | O |
| ATOM | 3290 | C | SER A 427 | 2.973 | 34.722 | 46.000 | 1.00 | 16.25 | C |
| ATOM | 3291 | O | SER A 427 | 2.595 | 35.800 | 45.561 | 1.00 | 15.92 | O |
| ATOM | 3292 | N | LEU A 428 | 2.195 | 33.908 | 46.723 | 1.00 | 16.53 | N |
| ATOM | 3294 | CA | LEU A 428 | 0.787 | 34.174 | 46.988 | 1.00 | 16.61 | C |
| ATOM | 3296 | CB | LEU A 428 | 0.197 | 33.089 | 47.851 | 1.00 | 16.85 | C |
| ATOM | 3299 | CG | LEU A 428 | -0.058 | 31.775 | 47.107 | 1.00 | 18.38 | C |
| ATOM | 3301 | CD1 | LEU A 428 | -0.363 | 30.689 | 48.151 | 1.00 | 18.87 | C |

| ATOM | 3305 | CD2 | LEU A 428 | -1.199 | 31.859 | 46.064 | 1.00 | 18.12 | C |
| ATOM | 3309 | C | LEU A 428 | 0.523 | 35.476 | 47.685 | 1.00 | 16.85 | C |
| ATOM | 3310 | O | LEU A 428 | -0.540 | 36.025 | 47.493 | 1.00 | 16.52 | O |
| ATOM | 3311 | N | ARG A 429 | 1.479 | 35.952 | 48.492 | 1.00 | 17.60 | N |
| ATOM | 3313 | CA | ARG A 429 | 1.358 | 37.220 | 49.219 | 1.00 | 17.77 | C |
| ATOM | 3315 | CB | ARG A 429 | 2.485 | 37.435 | 50.227 | 1.00 | 18.00 | C |
| ATOM | 3318 | CG | ARG A 429 | 2.480 | 36.588 | 51.439 | 1.00 | 17.80 | C |
| ATOM | 3321 | CD | ARG A 429 | 1.121 | 36.479 | 52.125 | 1.00 | 19.93 | C |
| ATOM | 3324 | NE | ARG A 429 | 1.196 | 35.633 | 53.321 | 1.00 | 20.21 | N |
| ATOM | 3326 | CZ | ARG A 429 | 1.457 | 36.083 | 54.542 | 1.00 | 20.19 | C |
| ATOM | 3327 | NH1 | ARG A 429 | 1.637 | 37.391 | 54.774 | 1.00 | 19.26 | N |
| ATOM | 3330 | NH2 | ARG A 429 | 1.524 | 35.207 | 55.538 | 1.00 | 20.42 | N |
| ATOM | 3333 | C | ARG A 429 | 1.436 | 38.363 | 48.283 | 1.00 | 18.10 | C |
| ATOM | 3334 | O | ARG A 429 | 0.653 | 39.273 | 48.394 | 1.00 | 18.81 | O |
| ATOM | 3335 | N | THR A 430 | 2.431 | 38.355 | 47.409 | 1.00 | 18.64 | N |
| ATOM | 3337 | CA | THR A 430 | 2.529 | 39.359 | 46.354 | 1.00 | 19.31 | C |
| ATOM | 3339 | CB | THR A 430 | 3.808 | 39.129 | 45.519 | 1.00 | 19.46 | C |
| ATOM | 3341 | OG1 | THR A 430 | 4.904 | 39.826 | 46.117 | 1.00 | 19.54 | O |
| ATOM | 3343 | CG2 | THR A 430 | 3.696 | 39.744 | 44.136 | 1.00 | 20.15 | C |
| ATOM | 3347 | C | THR A 430 | 1.282 | 39.310 | 45.455 | 1.00 | 19.59 | C |
| ATOM | 3348 | O | THR A 430 | 0.760 | 40.363 | 45.058 | 1.00 | 19.15 | O |
| ATOM | 3349 | N | LEU A 431 | 0.817 | 38.089 | 45.161 | 1.00 | 19.65 | N |
| ATOM | 3351 | CA | LEU A 431 | -0.321 | 37.867 | 44.279 | 1.00 | 19.98 | C |
| ATOM | 3353 | CB | LEU A 431 | -0.503 | 36.389 | 44.034 | 1.00 | 20.08 | C |
| ATOM | 3356 | CG | LEU A 431 | -0.281 | 35.784 | 42.650 | 1.00 | 21.04 | C |
| ATOM | 3358 | CD1 | LEU A 431 | 0.233 | 36.774 | 41.638 | 1.00 | 22.08 | C |
| ATOM | 3362 | CD2 | LEU A 431 | 0.614 | 34.536 | 42.731 | 1.00 | 20.80 | C |
| ATOM | 3366 | C | LEU A 431 | -1.620 | 38.425 | 44.847 | 1.00 | 20.42 | C |
| ATOM | 3367 | O | LEU A 431 | -2.438 | 38.944 | 44.096 | 1.00 | 20.94 | O |
| ATOM | 3368 | N | SER A 432 | -1.805 | 38.323 | 46.164 | 1.00 | 20.27 | N |
| ATOM | 3370 | CA | SER A 432 | -2.925 | 38.950 | 46.850 | 1.00 | 19.94 | C |
| ATOM | 3372 | CB | SER A 432 | -2.829 | 38.753 | 48.334 | 1.00 | 19.85 | C |
| ATOM | 3375 | OG | SER A 432 | -3.931 | 39.389 | 48.922 | 1.00 | 20.35 | O |
| ATOM | 3377 | C | SER A 432 | -2.994 | 40.429 | 46.654 | 1.00 | 20.43 | C |
| ATOM | 3378 | O | SER A 432 | -4.079 | 40.960 | 46.515 | 1.00 | 20.88 | O |
| ATOM | 3379 | N | SER A 433 | -1.842 | 41.103 | 46.699 | 1.00 | 20.85 | N |
| ATOM | 3381 | CA | SER A 433 | -1.768 | 42.553 | 46.458 | 1.00 | 20.63 | C |
| ATOM | 3383 | CB | SER A 433 | -0.381 | 43.093 | 46.772 | 1.00 | 20.87 | C |
| ATOM | 3386 | OG | SER A 433 | 0.018 | 42.700 | 48.074 | 1.00 | 22.56 | O |
| ATOM | 3388 | C | SER A 433 | -2.096 | 42.902 | 45.027 | 1.00 | 20.21 | C |
| ATOM | 3389 | O | SER A 433 | -2.773 | 43.883 | 44.790 | 1.00 | 20.71 | O |
| ATOM | 3390 | N | VAL A 434 | -1.616 | 42.111 | 44.067 | 1.00 | 19.98 | N |
| ATOM | 3392 | CA | VAL A 434 | -1.991 | 42.291 | 42.649 | 1.00 | 19.65 | C |
| ATOM | 3394 | CB | VAL A 434 | -1.292 | 41.273 | 41.698 | 1.00 | 19.49 | C |
| ATOM | 3396 | CG1 | VAL A 434 | -1.831 | 41.389 | 40.295 | 1.00 | 19.50 | C |
| ATOM | 3400 | CG2 | VAL A 434 | 0.201 | 41.480 | 41.659 | 1.00 | 19.36 | C |
| ATOM | 3404 | C | VAL A 434 | -3.505 | 42.126 | 42.483 | 1.00 | 19.66 | C |
| ATOM | 3405 | O | VAL A 434 | -4.109 | 42.756 | 41.619 | 1.00 | 19.42 | O |

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ATOM   3406  N    HIS A 435   -4.115 41.290 43.323 1.00 19.83        N
ATOM   3408  CA   HIS A 435   -5.566 41.125 43.313 1.00 19.75        C
ATOM   3410  CB   HIS A 435   -6.013 39.831 44.010 1.00 19.36        C
ATOM   3413  CG   HIS A 435   -7.491 39.736 44.151 1.00 18.62        C
ATOM   3414  ND1  HIS A 435   -8.138 40.014 45.328 1.00 17.77        N
ATOM   3416  CE1  HIS A 435   -9.438 39.896 45.151 1.00 18.31        C
ATOM   3418  NE2  HIS A 435   -9.659 39.574 43.893 1.00 17.98        N
ATOM   3420  CD2  HIS A 435   -8.456 39.478 43.244 1.00 18.86        C
ATOM   3422  C    HIS A 435   -6.308 42.333 43.893 1.00 20.14        C
ATOM   3423  O    HIS A 435   -7.361 42.676 43.389 1.00 19.98        O
ATOM   3424  N    SER A 436   -5.775 42.969 44.939 1.00 20.92        N
ATOM   3426  CA   SER A 436   -6.373 44.199 45.479 1.00 21.45        C
ATOM   3428  CB   SER A 436   -5.640 44.651 46.719 1.00 21.08        C
ATOM   3431  OG   SER A 436   -6.065 43.887 47.808 1.00 22.20        O
ATOM   3433  C    SER A 436   -6.353 45.347 44.473 1.00 22.17        C
ATOM   3434  O    SER A 436   -7.250 46.186 44.458 1.00 21.92        O
ATOM   3435  N    GLU A 437   -5.301 45.383 43.660 1.00 22.91        N
ATOM   3437  CA   GLU A 437   -5.144 46.372 42.599 1.00 23.43        C
ATOM   3439  CB   GLU A 437   -3.731 46.285 42.035 1.00 23.83        C
ATOM   3442  CG   GLU A 437   -2.668 46.706 43.033 1.00 25.55        C
ATOM   3445  CD   GLU A 437   -1.273 46.418 42.533 1.00 28.12        C
ATOM   3446  OE1  GLU A 437   -0.338 46.356 43.379 1.00 29.77        O
ATOM   3447  OE2  GLU A 437   -1.118 46.260 41.291 1.00 29.12        O
ATOM   3448  C    GLU A 437   -6.163 46.188 41.473 1.00 23.06        C
ATOM   3449  O    GLU A 437   -6.631 47.163 40.880 1.00 22.75        O
ATOM   3450  N    GLN A 438   -6.495 44.930 41.192 1.00 22.97        N
ATOM   3452  CA   GLN A 438   -7.547 44.592 40.243 1.00 22.59        C
ATOM   3454  CB   GLN A 438   -7.583 43.092 39.966 1.00 22.22        C
ATOM   3457  CG   GLN A 438   -8.688 42.644 39.030 1.00 21.85        C
ATOM   3460  CD   GLN A 438   -8.530 43.205 37.648 1.00 21.21        C
ATOM   3461  OE1  GLN A 438   -7.916 42.573 36.787 1.00 20.42        O
ATOM   3462  NE2  GLN A 438   -9.066 44.403 37.429 1.00 20.77        N
ATOM   3465  C    GLN A 438   -8.901 45.055 40.748 1.00 22.79        C
ATOM   3466  O    GLN A 438   -9.667 45.589 39.959 1.00 23.19        O
ATOM   3467  N    VAL A 439   -9.195 44.876 42.040 1.00 22.62        N
ATOM   3469  CA   VAL A 439  -10.482 45.306 42.605 1.00 23.09        C
ATOM   3471  CB   VAL A 439  -10.666 44.801 44.074 1.00 22.84        C
ATOM   3473  CG1  VAL A 439  -11.891 45.422 44.727 1.00 22.88        C
ATOM   3477  CG2  VAL A 439  -10.792 43.277 44.127 1.00 22.83        C
ATOM   3481  C    VAL A 439  -10.678 46.851 42.539 1.00 23.97        C
ATOM   3482  O    VAL A 439  -11.739 47.339 42.138 1.00 24.18        O
ATOM   3483  N    PHE A 440   -9.642 47.583 42.946 1.00 24.82        N
ATOM   3485  CA   PHE A 440   -9.590 49.039 42.982 1.00 25.26        C
ATOM   3487  CB   PHE A 440   -8.283 49.428 43.693 1.00 25.27        C
ATOM   3490  CG   PHE A 440   -7.944 50.907 43.654 1.00 27.10        C
ATOM   3491  CD1  PHE A 440   -7.993 51.678 44.821 1.00 27.94        C
ATOM   3493  CE1  PHE A 440   -7.655 53.041 44.798 1.00 28.61        C
ATOM   3495  CZ   PHE A 440   -7.250 53.650 43.601 1.00 28.95        C
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| ATOM | 3497 | CE2 | PHE | A | 440 | -7.184 | 52.897 | 42.433 | 1.00 | 28.81 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 3499 | CD2 | PHE | A | 440 | -7.516 | 51.523 | 42.466 | 1.00 | 28.66 | C |
| ATOM | 3501 | C | PHE | A | 440 | -9.671 | 49.601 | 41.545 | 1.00 | 25.77 | C |
| ATOM | 3502 | O | PHE | A | 440 | -10.244 | 50.687 | 41.290 | 1.00 | 25.46 | O |
| ATOM | 3503 | N | ALA | A | 441 | -9.113 | 48.839 | 40.605 | 1.00 | 26.29 | N |
| ATOM | 3505 | CA | ALA | A | 441 | -9.124 | 49.206 | 39.183 | 1.00 | 26.44 | C |
| ATOM | 3507 | CB | ALA | A | 441 | -8.154 | 48.333 | 38.413 | 1.00 | 26.33 | C |
| ATOM | 3511 | C | ALA | A | 441 | -10.507 | 49.075 | 38.576 | 1.00 | 26.73 | C |
| ATOM | 3512 | O | ALA | A | 441 | -10.884 | 49.872 | 37.737 | 1.00 | 26.80 | O |
| ATOM | 3513 | N | LEU | A | 442 | -11.234 | 48.042 | 38.996 | 1.00 | 27.41 | N |
| ATOM | 3515 | CA | LEU | A | 442 | -12.581 | 47.757 | 38.515 | 1.00 | 27.87 | C |
| ATOM | 3517 | CB | LEU | A | 442 | -13.085 | 46.401 | 39.040 | 1.00 | 27.83 | C |
| ATOM | 3520 | CG | LEU | A | 442 | -12.410 | 45.158 | 38.444 | 1.00 | 27.69 | C |
| ATOM | 3522 | CD1 | LEU | A | 442 | -12.669 | 43.953 | 39.316 | 1.00 | 27.99 | C |
| ATOM | 3526 | CD2 | LEU | A | 442 | -12.869 | 44.882 | 37.028 | 1.00 | 27.30 | C |
| ATOM | 3530 | C | LEU | A | 442 | -13.514 | 48.840 | 38.983 | 1.00 | 28.46 | C |
| ATOM | 3531 | O | LEU | A | 442 | -14.329 | 49.317 | 38.218 | 1.00 | 28.61 | O |
| ATOM | 3532 | N | ARG | A | 443 | -13.391 | 49.228 | 40.246 | 1.00 | 29.29 | N |
| ATOM | 3534 | CA | ARG | A | 443 | -14.209 | 50.299 | 40.808 | 1.00 | 30.04 | C |
| ATOM | 3536 | CB | ARG | A | 443 | -13.736 | 50.649 | 42.217 | 1.00 | 30.22 | C |
| ATOM | 3539 | CG | ARG | A | 443 | -14.192 | 49.662 | 43.274 | 1.00 | 31.52 | C |
| ATOM | 3542 | CD | ARG | A | 443 | -15.332 | 50.167 | 44.148 | 1.00 | 33.85 | C |
| ATOM | 3545 | NE | ARG | A | 443 | -14.955 | 50.238 | 45.560 | 1.00 | 35.83 | N |
| ATOM | 3547 | CZ | ARG | A | 443 | -15.607 | 50.929 | 46.500 | 1.00 | 37.07 | C |
| ATOM | 3548 | NH1 | ARG | A | 443 | -16.700 | 51.632 | 46.203 | 1.00 | 37.49 | N |
| ATOM | 3551 | NH2 | ARG | A | 443 | -15.159 | 50.913 | 47.756 | 1.00 | 37.38 | N |
| ATOM | 3554 | C | ARG | A | 443 | -14.196 | 51.546 | 39.923 | 1.00 | 30.25 | C |
| ATOM | 3555 | O | ARG | A | 443 | -15.220 | 52.224 | 39.781 | 1.00 | 29.93 | O |
| ATOM | 3556 | N | LEU | A | 444 | -13.032 | 51.831 | 39.334 | 1.00 | 30.75 | N |
| ATOM | 3558 | CA | LEU | A | 444 | -12.860 | 52.956 | 38.392 | 1.00 | 31.09 | C |
| ATOM | 3560 | CB | LEU | A | 444 | -11.384 | 53.066 | 37.950 | 1.00 | 31.17 | C |
| ATOM | 3563 | CG | LEU | A | 444 | -10.487 | 54.098 | 38.648 | 1.00 | 31.22 | C |
| ATOM | 3565 | CD1 | LEU | A | 444 | -10.498 | 53.963 | 40.166 | 1.00 | 31.19 | C |
| ATOM | 3569 | CD2 | LEU | A | 444 | -9.067 | 53.983 | 38.114 | 1.00 | 31.45 | C |
| ATOM | 3573 | C | LEU | A | 444 | -13.787 | 52.885 | 37.151 | 1.00 | 31.11 | C |
| ATOM | 3574 | O | LEU | A | 444 | -14.194 | 53.923 | 36.611 | 1.00 | 31.11 | O |
| ATOM | 3575 | N | GLN | A | 445 | -14.092 | 51.662 | 36.709 | 1.00 | 31.11 | N |
| ATOM | 3577 | CA | GLN | A | 445 | -15.074 | 51.394 | 35.648 | 1.00 | 31.21 | C |
| ATOM | 3579 | CB | GLN | A | 445 | -14.598 | 50.220 | 34.787 | 1.00 | 31.41 | C |
| ATOM | 3582 | CG | GLN | A | 445 | -13.132 | 50.239 | 34.392 | 1.00 | 32.12 | C |
| ATOM | 3585 | CD | GLN | A | 445 | -12.865 | 49.300 | 33.233 | 1.00 | 33.14 | C |
| ATOM | 3586 | OE1 | GLN | A | 445 | -12.702 | 48.082 | 33.447 | 1.00 | 32.74 | O |
| ATOM | 3587 | NE2 | GLN | A | 445 | -12.866 | 49.847 | 31.994 | 1.00 | 32.19 | N |
| ATOM | 3590 | C | GLN | A | 445 | -16.465 | 51.032 | 36.204 | 1.00 | 31.07 | C |
| ATOM | 3591 | O | GLN | A | 445 | -17.130 | 50.134 | 35.674 | 1.00 | 31.04 | O |
| ATOM | 3592 | N | ASP | A | 446 | -16.901 | 51.742 | 37.250 | 1.00 | 30.89 | N |
| ATOM | 3594 | CA | ASP | A | 446 | -18.107 | 51.412 | 38.047 | 1.00 | 30.55 | C |
| ATOM | 3596 | CB | ASP | A | 446 | -19.350 | 52.244 | 37.606 | 1.00 | 30.66 | C |

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ATOM   3599  CG  ASP A 446   -19.798 51.973 36.150 1.00 31.69      C
ATOM   3600  OD1 ASP A 446   -20.020 52.946 35.373 1.00 31.83      O
ATOM   3601  OD2 ASP A 446   -19.981 50.822 35.695 1.00 32.98      O
ATOM   3602  C   ASP A 446   -18.421 49.913 38.134 1.00 29.91      C
ATOM   3603  O   ASP A 446   -19.580 49.514 38.041 1.00 30.02      O
ATOM   3604  N   LYS A 447   -17.386 49.095 38.336 1.00 29.01      N
ATOM   3606  CA  LYS A 447   -17.536 47.638 38.442 1.00 28.56      C
ATOM   3608  CB  LYS A 447   -16.598 46.911 37.463 1.00 28.67      C
ATOM   3611  CG  LYS A 447   -16.953 47.087 35.975 1.00 29.64      C
ATOM   3614  CD  LYS A 447   -17.028 45.745 35.199 1.00 30.85      C
ATOM   3617  CE  LYS A 447   -15.821 45.495 34.266 1.00 31.17      C
ATOM   3620  NZ  LYS A 447   -16.241 45.320 32.835 1.00 31.49      N
ATOM   3624  C   LYS A 447   -17.265 47.168 39.878 1.00 27.76      C
ATOM   3625  O   LYS A 447   -16.191 46.639 40.168 1.00 27.90      O
ATOM   3626  N   LYS A 448   -18.263 47.349 40.749 1.00 26.87      N
ATOM   3628  CA  LYS A 448   -18.170 47.078 42.194 1.00 26.07      C
ATOM   3630  CB  LYS A 448   -19.153 47.975 42.975 1.00 26.32      C
ATOM   3633  CG  LYS A 448   -19.143 49.495 42.654 1.00 26.59      C
ATOM   3636  CD  LYS A 448   -20.515 50.161 42.976 1.00 27.73      C
ATOM   3639  CE  LYS A 448   -20.398 51.547 43.657 1.00 28.37      C
ATOM   3642  NZ  LYS A 448   -21.696 52.017 44.266 1.00 27.68      N
ATOM   3646  C   LYS A 448   -18.460 45.613 42.581 1.00 25.00      C
ATOM   3647  O   LYS A 448   -19.382 44.978 42.065 1.00 24.64      O
ATOM   3648  N   LEU A 449   -17.677 45.097 43.519 1.00 23.95      N
ATOM   3650  CA  LEU A 449   -17.946 43.791 44.105 1.00 23.17      C
ATOM   3652  CB  LEU A 449   -16.916 43.468 45.186 1.00 22.93      C
ATOM   3655  CG  LEU A 449   -15.452 43.316 44.788 1.00 22.84      C
ATOM   3657  CD1 LEU A 449   -14.614 42.959 46.012 1.00 22.45      C
ATOM   3661  CD2 LEU A 449   -15.288 42.271 43.719 1.00 23.33      C
ATOM   3665  C   LEU A 449   -19.342 43.712 44.746 1.00 22.85      C
ATOM   3666  O   LEU A 449   -19.805 44.665 45.383 1.00 22.49      O
ATOM   3667  N   PRO A 450   -20.010 42.569 44.593 1.00 22.45      N
ATOM   3668  CA  PRO A 450   -21.241 42.307 45.343 1.00 22.20      C
ATOM   3670  CB  PRO A 450   -21.803 41.047 44.666 1.00 22.22      C
ATOM   3673  CG  PRO A 450   -20.637 40.367 44.087 1.00 21.90      C
ATOM   3676  CD  PRO A 450   -19.674 41.443 43.702 1.00 22.32      C
ATOM   3679  C   PRO A 450   -20.978 42.057 46.844 1.00 21.92      C
ATOM   3680  O   PRO A 450   -19.844 41.845 47.289 1.00 21.27      O
ATOM   3681  N   PRO A 451   -22.050 42.075 47.622 1.00 21.60      N
ATOM   3682  CA  PRO A 451   -21.931 42.136 49.075 1.00 21.42      C
ATOM   3684  CB  PRO A 451   -23.368 41.933 49.537 1.00 21.48      C
ATOM   3687  CG  PRO A 451   -24.173 42.511 48.422 1.00 21.66      C
ATOM   3690  CD  PRO A 451   -23.460 42.050 47.195 1.00 21.52      C
ATOM   3693  C   PRO A 451   -21.033 41.081 49.665 1.00 21.33      C
ATOM   3694  O   PRO A 451   -20.235 41.434 50.504 1.00 21.87      O
ATOM   3695  N   LEU A 452   -21.154 39.826 49.239 1.00 21.12      N
ATOM   3697  CA  LEU A 452   -20.446 38.723 49.896 1.00 20.62      C
ATOM   3699  CB  LEU A 452   -20.979 37.379 49.408 1.00 20.09      C
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ATOM   3702 CG  LEU A 452    -22.431 37.092 49.784 1.00 20.73        C
ATOM   3704 CD1 LEU A 452    -22.785 35.714 49.301 1.00 21.49        C
ATOM   3708 CD2 LEU A 452    -22.716 37.186 51.287 1.00 20.70        C
ATOM   3712 C   LEU A 452    -18.931 38.801 49.717 1.00 20.65        C
ATOM   3713 O   LEU A 452    -18.167 38.384 50.601 1.00 21.01        O
ATOM   3714 N   LEU A 453    -18.514 39.333 48.571 1.00 20.44        N
ATOM   3716 CA  LEU A 453    -17.120 39.567 48.284 1.00 20.21        C
ATOM   3718 CB  LEU A 453    -16.874 39.494 46.771 1.00 19.94        C
ATOM   3721 CG  LEU A 453    -17.234 38.206 46.036 1.00 18.63        C
ATOM   3723 CD1 LEU A 453    -16.851 38.295 44.560 1.00 17.21        C
ATOM   3727 CD2 LEU A 453    -16.565 37.017 46.679 1.00 18.51        C
ATOM   3731 C   LEU A 453    -16.653 40.926 48.827 1.00 20.82        C
ATOM   3732 O   LEU A 453    -15.474 41.090 49.107 1.00 20.92        O
ATOM   3733 N   SER A 454    -17.549 41.900 48.981 1.00 21.37        N
ATOM   3735 CA  SER A 454    -17.140 43.210 49.503 1.00 21.77        C
ATOM   3737 CB  SER A 454    -18.195 44.314 49.255 1.00 21.86        C
ATOM   3740 OG  SER A 454    -17.652 45.370 48.461 1.00 20.15        O
ATOM   3742 C   SER A 454    -16.764 43.123 50.982 1.00 22.46        C
ATOM   3743 O   SER A 454    -15.807 43.761 51.400 1.00 21.96        O
ATOM   3744 N   GLU A 455    -17.479 42.312 51.757 1.00 23.59        N
ATOM   3746 CA  GLU A 455    -17.096 42.049 53.141 1.00 25.53        C
ATOM   3748 CB  GLU A 455    -17.878 40.852 53.690 1.00 25.84        C
ATOM   3751 CG  GLU A 455    -19.276 41.185 54.208 1.00 28.77        C
ATOM   3754 CD  GLU A 455    -20.256 39.994 54.195 1.00 31.25        C
ATOM   3755 OE1 GLU A 455    -21.394 40.150 54.700 1.00 31.67        O
ATOM   3756 OE2 GLU A 455    -19.905 38.907 53.671 1.00 33.40        O
ATOM   3757 C   GLU A 455    -15.572 41.767 53.264 1.00 26.68        C
ATOM   3758 O   GLU A 455    -14.908 42.249 54.198 1.00 27.07        O
ATOM   3759 N   ILE A 456    -15.033 41.007 52.298 1.00 27.38        N
ATOM   3761 CA  ILE A 456    -13.678 40.479 52.359 1.00 27.66        C
ATOM   3763 CB  ILE A 456    -13.569 39.091 51.642 1.00 27.97        C
ATOM   3765 CG1 ILE A 456    -14.852 38.268 51.657 1.00 27.83        C
ATOM   3768 CD1 ILE A 456    -14.735 37.002 50.750 1.00 28.22        C
ATOM   3772 CG2 ILE A 456    -12.479 38.256 52.267 1.00 28.27        C
ATOM   3776 C   ILE A 456    -12.617 41.407 51.744 1.00 27.81        C
ATOM   3777 O   ILE A 456    -11.530 41.525 52.294 1.00 27.84        O
ATOM   3778 N   TRP A 457    -12.916 42.059 50.619 1.00 28.14        N
ATOM   3780 CA  TRP A 457    -11.868 42.665 49.790 1.00 28.27        C
ATOM   3782 CB  TRP A 457    -11.835 41.959 48.438 1.00 27.80        C
ATOM   3785 CG  TRP A 457    -11.435 40.531 48.478 1.00 26.47        C
ATOM   3786 CD1 TRP A 457    -10.558 39.953 49.332 1.00 27.09        C
ATOM   3788 NE1 TRP A 457    -10.425 38.613 49.055 1.00 25.93        N
ATOM   3790 CE2 TRP A 457    -11.230 38.300 47.999 1.00 24.67        C
ATOM   3791 CD2 TRP A 457    -11.882 39.486 47.609 1.00 25.03        C
ATOM   3792 CE3 TRP A 457    -12.766 39.430 46.534 1.00 24.74        C
ATOM   3794 CZ3 TRP A 457    -12.973 38.214 45.906 1.00 24.55        C
ATOM   3796 CH2 TRP A 457    -12.305 37.059 46.315 1.00 23.20        C
ATOM   3798 CZ2 TRP A 457    -11.438 37.079 47.361 1.00 23.28        C
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| ATOM | 3800 | C   | TRP | A | 457 | -11.866 | 44.207 | 49.556 | 1.00 | 29.43 | C |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 3801 | O   | TRP | A | 457 | -10.929 | 44.708 | 48.934 | 1.00 | 30.28 | O |
| ATOM | 3802 | N   | ASP | A | 458 | -12.832 | 44.991 | 50.016 | 1.00 | 30.20 | N |
| ATOM | 3804 | CA  | ASP | A | 458 | -12.664 | 46.443 | 49.817 | 1.00 | 31.40 | C |
| ATOM | 3806 | CB  | ASP | A | 458 | -13.193 | 46.934 | 48.434 | 1.00 | 31.63 | C |
| ATOM | 3809 | CG  | ASP | A | 458 | -14.687 | 46.637 | 48.197 | 1.00 | 31.97 | C |
| ATOM | 3810 | OD1 | ASP | A | 458 | -15.402 | 46.153 | 49.106 | 1.00 | 32.78 | O |
| ATOM | 3811 | OD2 | ASP | A | 458 | -15.234 | 46.859 | 47.099 | 1.00 | 32.00 | O |
| ATOM | 3812 | C   | ASP | A | 458 | -13.209 | 47.291 | 50.953 | 1.00 | 32.10 | C |
| ATOM | 3813 | O   | ASP | A | 458 | -12.455 | 47.641 | 51.862 | 1.00 | 33.21 | O |
| ATOM | 3814 | O13 | 444 | A | 500 | -12.903 | 32.520 | 41.908 | 1.00 | 38.73 | O |
| ATOM | 3815 | S12 | 444 | A | 500 | -11.714 | 32.268 | 41.174 | 1.00 | 36.50 | S |
| ATOM | 3816 | O14 | 444 | A | 500 | -11.233 | 30.945 | 41.500 | 1.00 | 38.80 | O |
| ATOM | 3817 | C01 | 444 | A | 500 | -12.307 | 32.240 | 39.501 | 1.00 | 35.82 | C |
| ATOM | 3818 | C02 | 444 | A | 500 | -11.762 | 31.312 | 38.546 | 1.00 | 36.26 | C |
| ATOM | 3820 | C03 | 444 | A | 500 | -12.224 | 31.300 | 37.209 | 1.00 | 35.69 | C |
| ATOM | 3822 | C04 | 444 | A | 500 | -13.224 | 32.213 | 36.827 | 1.00 | 36.31 | C |
| ATOM | 3824 | C05 | 444 | A | 500 | -13.749 | 33.139 | 37.783 | 1.00 | 36.97 | C |
| ATOM | 3826 | C06 | 444 | A | 500 | -13.296 | 33.164 | 39.129 | 1.00 | 35.39 | C |
| ATOM | 3828 | N15 | 444 | A | 500 | -10.433 | 33.536 | 41.205 | 1.00 | 29.97 | N |
| ATOM | 3829 | C16 | 444 | A | 500 | -9.292  | 33.272 | 40.226 | 1.00 | 28.97 | C |
| ATOM | 3832 | C19 | 444 | A | 500 | -7.983  | 33.620 | 40.842 | 1.00 | 29.01 | C |
| ATOM | 3833 | F22 | 444 | A | 500 | -7.029  | 33.116 | 40.045 | 1.00 | 29.49 | F |
| ATOM | 3834 | F21 | 444 | A | 500 | -7.818  | 33.167 | 42.091 | 1.00 | 28.48 | F |
| ATOM | 3835 | F20 | 444 | A | 500 | -7.832  | 34.923 | 40.956 | 1.00 | 30.58 | F |
| ATOM | 3836 | C23 | 444 | A | 500 | -10.835 | 34.982 | 41.185 | 1.00 | 24.01 | C |
| ATOM | 3837 | C24 | 444 | A | 500 | -10.965 | 35.672 | 42.397 | 1.00 | 22.07 | C |
| ATOM | 3839 | C25 | 444 | A | 500 | -11.379 | 37.020 | 42.458 | 1.00 | 19.90 | C |
| ATOM | 3841 | C28 | 444 | A | 500 | -11.160 | 35.725 | 40.000 | 1.00 | 21.92 | C |
| ATOM | 3843 | C27 | 444 | A | 500 | -11.581 | 37.074 | 40.053 | 1.00 | 19.73 | C |
| ATOM | 3845 | C26 | 444 | A | 500 | -11.693 | 37.779 | 41.289 | 1.00 | 17.65 | C |
| ATOM | 3846 | C33 | 444 | A | 500 | -12.190 | 39.247 | 41.480 | 1.00 | 16.46 | C |
| ATOM | 3847 | C34 | 444 | A | 500 | -11.551 | 40.241 | 40.502 | 1.00 | 16.76 | C |
| ATOM | 3848 | F36 | 444 | A | 500 | -11.967 | 41.510 | 40.769 | 1.00 | 16.31 | F |
| ATOM | 3849 | F37 | 444 | A | 500 | -10.218 | 40.150 | 40.593 | 1.00 | 17.90 | F |
| ATOM | 3850 | F35 | 444 | A | 500 | -11.819 | 39.974 | 39.215 | 1.00 | 17.74 | F |
| ATOM | 3851 | O42 | 444 | A | 500 | -11.993 | 39.783 | 42.823 | 1.00 | 14.95 | O |
| ATOM | 3853 | C38 | 444 | A | 500 | -13.728 | 39.235 | 41.163 | 1.00 | 17.17 | C |
| ATOM | 3854 | F39 | 444 | A | 500 | -14.006 | 38.764 | 39.913 | 1.00 | 16.84 | F |
| ATOM | 3855 | F40 | 444 | A | 500 | -14.373 | 38.394 | 42.018 | 1.00 | 16.20 | F |
| ATOM | 3856 | F41 | 444 | A | 500 | -14.397 | 40.411 | 41.232 | 1.00 | 16.25 | F |
| ATOM | 3857 | N   | ALA | B | 219 | 28.704  | 17.672 | 55.232 | 1.00 | 24.68 | N |
| ATOM | 3859 | CA  | ALA | B | 219 | 29.588  | 18.889 | 55.338 | 1.00 | 24.58 | C |
| ATOM | 3861 | CB  | ALA | B | 219 | 31.057  | 18.475 | 55.521 | 1.00 | 24.07 | C |
| ATOM | 3865 | C   | ALA | B | 219 | 29.402  | 19.870 | 54.131 | 1.00 | 24.15 | C |
| ATOM | 3866 | O   | ALA | B | 219 | 29.068  | 19.449 | 53.011 | 1.00 | 24.62 | O |
| ATOM | 3869 | N   | LEU | B | 220 | 29.571  | 21.174 | 54.377 | 1.00 | 23.16 | N |
| ATOM | 3871 | CA  | LEU | B | 220 | 29.472  | 22.199 | 53.328 | 1.00 | 21.99 | C |

| ATOM | 3873 | CB | LEU B 220 | 29.618 | 23.615 | 53.917 | 1.00 | 22.09 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 3876 | CG | LEU B 220 | 28.445 | 24.252 | 54.663 | 1.00 | 22.49 | C |
| ATOM | 3878 | CD1 | LEU B 220 | 28.806 | 25.618 | 55.244 | 1.00 | 22.67 | C |
| ATOM | 3882 | CD2 | LEU B 220 | 27.274 | 24.393 | 53.735 | 1.00 | 23.37 | C |
| ATOM | 3886 | C | LEU B 220 | 30.574 | 21.976 | 52.321 | 1.00 | 20.67 | C |
| ATOM | 3887 | O | LEU B 220 | 31.672 | 21.583 | 52.686 | 1.00 | 20.63 | O |
| ATOM | 3888 | N | THR B 221 | 30.290 | 22.225 | 51.056 | 1.00 | 19.37 | N |
| ATOM | 3890 | CA | THR B 221 | 31.324 | 22.139 | 50.027 | 1.00 | 18.46 | C |
| ATOM | 3892 | CB | THR B 221 | 30.691 | 21.996 | 48.660 | 1.00 | 18.60 | C |
| ATOM | 3894 | OG1 | THR B 221 | 29.876 | 23.146 | 48.391 | 1.00 | 18.73 | O |
| ATOM | 3896 | CG2 | THR B 221 | 29.728 | 20.812 | 48.623 | 1.00 | 18.50 | C |
| ATOM | 3900 | C | THR B 221 | 32.188 | 23.387 | 50.055 | 1.00 | 17.40 | C |
| ATOM | 3901 | O | THR B 221 | 31.846 | 24.361 | 50.699 | 1.00 | 16.71 | O |
| ATOM | 3902 | N | ALA B 222 | 33.316 | 23.363 | 49.370 | 1.00 | 16.94 | N |
| ATOM | 3904 | CA | ALA B 222 | 34.154 | 24.554 | 49.299 | 1.00 | 17.09 | C |
| ATOM | 3906 | CB | ALA B 222 | 35.444 | 24.268 | 48.587 | 1.00 | 16.86 | C |
| ATOM | 3910 | C | ALA B 222 | 33.393 | 25.687 | 48.602 | 1.00 | 17.18 | C |
| ATOM | 3911 | O | ALA B 222 | 33.418 | 26.821 | 49.053 | 1.00 | 17.54 | O |
| ATOM | 3912 | N | ALA B 223 | 32.686 | 25.375 | 47.528 | 1.00 | 17.06 | N |
| ATOM | 3914 | CA | ALA B 223 | 31.927 | 26.389 | 46.822 | 1.00 | 17.33 | C |
| ATOM | 3916 | CB | ALA B 223 | 31.190 | 25.781 | 45.660 | 1.00 | 17.42 | C |
| ATOM | 3920 | C | ALA B 223 | 30.956 | 27.083 | 47.762 | 1.00 | 17.63 | C |
| ATOM | 3921 | O | ALA B 223 | 30.837 | 28.298 | 47.750 | 1.00 | 17.46 | O |
| ATOM | 3922 | N | GLN B 224 | 30.290 | 26.292 | 48.594 | 1.00 | 18.35 | N |
| ATOM | 3924 | CA | GLN B 224 | 29.242 | 26.776 | 49.504 | 1.00 | 18.65 | C |
| ATOM | 3926 | CB | GLN B 224 | 28.462 | 25.594 | 50.120 | 1.00 | 18.47 | C |
| ATOM | 3929 | CG | GLN B 224 | 27.469 | 24.947 | 49.161 | 1.00 | 18.73 | C |
| ATOM | 3932 | CD | GLN B 224 | 26.721 | 23.757 | 49.765 | 1.00 | 18.05 | C |
| ATOM | 3933 | OE1 | GLN B 224 | 27.221 | 23.088 | 50.658 | 1.00 | 18.57 | O |
| ATOM | 3934 | NE2 | GLN B 224 | 25.523 | 23.509 | 49.278 | 1.00 | 15.43 | N |
| ATOM | 3937 | C | GLN B 224 | 29.815 | 27.643 | 50.613 | 1.00 | 18.94 | C |
| ATOM | 3938 | O | GLN B 224 | 29.189 | 28.628 | 51.022 | 1.00 | 18.39 | O |
| ATOM | 3939 | N | GLU B 225 | 30.991 | 27.260 | 51.108 | 1.00 | 19.45 | N |
| ATOM | 3941 | CA | GLU B 225 | 31.637 | 28.043 | 52.135 | 1.00 | 20.29 | C |
| ATOM | 3943 | CB | GLU B 225 | 32.820 | 27.331 | 52.758 | 1.00 | 20.53 | C |
| ATOM | 3946 | CG | GLU B 225 | 32.388 | 26.464 | 53.917 | 1.00 | 22.48 | C |
| ATOM | 3949 | CD | GLU B 225 | 33.538 | 25.795 | 54.602 | 1.00 | 23.89 | C |
| ATOM | 3950 | OE1 | GLU B 225 | 34.681 | 26.120 | 54.235 | 1.00 | 24.51 | O |
| ATOM | 3951 | OE2 | GLU B 225 | 33.285 | 24.955 | 55.503 | 1.00 | 26.73 | O |
| ATOM | 3952 | C | GLU B 225 | 32.088 | 29.334 | 51.537 | 1.00 | 20.43 | C |
| ATOM | 3953 | O | GLU B 225 | 31.942 | 30.365 | 52.163 | 1.00 | 20.91 | O |
| ATOM | 3954 | N | LEU B 226 | 32.610 | 29.285 | 50.323 | 1.00 | 20.47 | N |
| ATOM | 3956 | CA | LEU B 226 | 33.125 | 30.479 | 49.703 | 1.00 | 20.90 | C |
| ATOM | 3958 | CB | LEU B 226 | 33.872 | 30.139 | 48.413 | 1.00 | 21.31 | C |
| ATOM | 3961 | CG | LEU B 226 | 34.698 | 31.259 | 47.755 | 1.00 | 21.27 | C |
| ATOM | 3963 | CD1 | LEU B 226 | 35.609 | 31.969 | 48.733 | 1.00 | 21.43 | C |
| ATOM | 3967 | CD2 | LEU B 226 | 35.505 | 30.650 | 46.674 | 1.00 | 21.43 | C |
| ATOM | 3971 | C | LEU B 226 | 31.997 | 31.465 | 49.427 | 1.00 | 21.31 | C |

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| ATOM | 3972 | O   | LEU | B | 226 | 32.160 | 32.670 | 49.647 | 1.00 | 21.15 | O |
| ATOM | 3973 | N   | MET | B | 227 | 30.849 | 30.956 | 48.985 | 1.00 | 21.73 | N |
| ATOM | 3975 | CA  | MET | B | 227 | 29.714 | 31.813 | 48.664 | 1.00 | 22.09 | C |
| ATOM | 3977 | CB  | MET | B | 227 | 28.634 | 31.054 | 47.892 | 1.00 | 22.54 | C |
| ATOM | 3980 | CG  | MET | B | 227 | 27.269 | 30.909 | 48.549 | 1.00 | 23.79 | C |
| ATOM | 3983 | SD  | MET | B | 227 | 26.142 | 29.773 | 47.621 | 1.00 | 27.96 | S |
| ATOM | 3984 | CE  | MET | B | 227 | 27.188 | 28.736 | 46.570 | 1.00 | 27.48 | C |
| ATOM | 3988 | C   | MET | B | 227 | 29.172 | 32.474 | 49.912 | 1.00 | 22.21 | C |
| ATOM | 3989 | O   | MET | B | 227 | 28.708 | 33.588 | 49.833 | 1.00 | 22.95 | O |
| ATOM | 3990 | N   | ILE | B | 228 | 29.266 | 31.823 | 51.068 | 1.00 | 22.34 | N |
| ATOM | 3992 | CA  | ILE | B | 228 | 28.910 | 32.476 | 52.333 | 1.00 | 22.29 | C |
| ATOM | 3994 | CB  | ILE | B | 228 | 28.737 | 31.450 | 53.511 | 1.00 | 22.56 | C |
| ATOM | 3996 | CG1 | ILE | B | 228 | 27.588 | 30.472 | 53.242 | 1.00 | 23.49 | C |
| ATOM | 3999 | CD1 | ILE | B | 228 | 27.627 | 29.236 | 54.122 | 1.00 | 23.22 | C |
| ATOM | 4003 | CG2 | ILE | B | 228 | 28.437 | 32.169 | 54.846 | 1.00 | 22.22 | C |
| ATOM | 4007 | C   | ILE | B | 228 | 29.960 | 33.531 | 52.699 | 1.00 | 21.82 | C |
| ATOM | 4008 | O   | ILE | B | 228 | 29.614 | 34.617 | 53.154 | 1.00 | 21.47 | O |
| ATOM | 4009 | N   | GLN | B | 229 | 31.238 | 33.211 | 52.521 | 1.00 | 21.59 | N |
| ATOM | 4011 | CA  | GLN | B | 229 | 32.324 | 34.134 | 52.913 | 1.00 | 21.52 | C |
| ATOM | 4013 | CB  | GLN | B | 229 | 33.685 | 33.452 | 52.905 | 1.00 | 21.14 | C |
| ATOM | 4016 | CG  | GLN | B | 229 | 33.892 | 32.331 | 53.874 | 1.00 | 21.05 | C |
| ATOM | 4019 | CD  | GLN | B | 229 | 35.306 | 31.720 | 53.750 | 1.00 | 22.52 | C |
| ATOM | 4020 | OE1 | GLN | B | 229 | 36.108 | 32.126 | 52.906 | 1.00 | 23.55 | O |
| ATOM | 4021 | NE2 | GLN | B | 229 | 35.607 | 30.755 | 54.605 | 1.00 | 23.97 | N |
| ATOM | 4024 | C   | GLN | B | 229 | 32.362 | 35.373 | 51.986 | 1.00 | 21.62 | C |
| ATOM | 4025 | O   | GLN | B | 229 | 32.573 | 36.499 | 52.457 | 1.00 | 20.86 | O |
| ATOM | 4026 | N   | GLN | B | 230 | 32.153 | 35.142 | 50.684 | 1.00 | 21.69 | N |
| ATOM | 4028 | CA  | GLN | B | 230 | 31.980 | 36.219 | 49.695 | 1.00 | 22.27 | C |
| ATOM | 4030 | CB  | GLN | B | 230 | 31.551 | 35.671 | 48.304 | 1.00 | 22.97 | C |
| ATOM | 4033 | CG  | GLN | B | 230 | 32.497 | 35.982 | 47.154 | 1.00 | 25.55 | C |
| ATOM | 4036 | CD  | GLN | B | 230 | 32.631 | 34.843 | 46.076 | 1.00 | 29.62 | C |
| ATOM | 4037 | OE1 | GLN | B | 230 | 31.764 | 33.960 | 45.941 | 1.00 | 30.03 | O |
| ATOM | 4038 | NE2 | GLN | B | 230 | 33.734 | 34.895 | 45.308 | 1.00 | 31.02 | N |
| ATOM | 4041 | C   | GLN | B | 230 | 30.910 | 37.187 | 50.183 | 1.00 | 21.84 | C |
| ATOM | 4042 | O   | GLN | B | 230 | 31.139 | 38.390 | 50.202 | 1.00 | 21.52 | O |
| ATOM | 4043 | N   | LEU | B | 231 | 29.742 | 36.648 | 50.550 | 1.00 | 21.50 | N |
| ATOM | 4045 | CA  | LEU | B | 231 | 28.599 | 37.461 | 50.943 | 1.00 | 21.25 | C |
| ATOM | 4047 | CB  | LEU | B | 231 | 27.354 | 36.589 | 51.108 | 1.00 | 20.78 | C |
| ATOM | 4050 | CG  | LEU | B | 231 | 26.673 | 36.046 | 49.837 | 1.00 | 20.15 | C |
| ATOM | 4052 | CD1 | LEU | B | 231 | 25.392 | 35.295 | 50.237 | 1.00 | 19.85 | C |
| ATOM | 4056 | CD2 | LEU | B | 231 | 26.335 | 37.096 | 48.808 | 1.00 | 19.23 | C |
| ATOM | 4060 | C   | LEU | B | 231 | 28.865 | 38.252 | 52.232 | 1.00 | 21.94 | C |
| ATOM | 4061 | O   | LEU | B | 231 | 28.598 | 39.448 | 52.300 | 1.00 | 21.80 | O |
| ATOM | 4062 | N   | VAL | B | 232 | 29.426 | 37.585 | 53.235 | 1.00 | 22.76 | N |
| ATOM | 4064 | CA  | VAL | B | 232 | 29.628 | 38.171 | 54.549 | 1.00 | 23.21 | C |
| ATOM | 4066 | CB  | VAL | B | 232 | 30.141 | 37.090 | 55.513 | 1.00 | 23.16 | C |
| ATOM | 4068 | CG1 | VAL | B | 232 | 30.761 | 37.688 | 56.793 | 1.00 | 22.84 | C |
| ATOM | 4072 | CG2 | VAL | B | 232 | 29.026 | 36.110 | 55.844 | 1.00 | 22.95 | C |

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ATOM   4076 C   VAL B 232    30.630 39.320 54.456 1.00 24.43        C
ATOM   4077 O   VAL B 232    30.505 40.316 55.165 1.00 25.28        O
ATOM   4078 N   ALA B 233    31.619 39.159 53.572 1.00 25.43        N
ATOM   4080 CA  ALA B 233    32.706 40.125 53.343 1.00 26.13        C
ATOM   4082 CB  ALA B 233    33.869 39.411 52.651 1.00 26.16        C
ATOM   4086 C   ALA B 233    32.307 41.346 52.502 1.00 27.05        C
ATOM   4087 O   ALA B 233    32.789 42.446 52.732 1.00 27.17        O
ATOM   4088 N   ALA B 234    31.490 41.118 51.482 1.00 28.25        N
ATOM   4090 CA  ALA B 234    30.831 42.176 50.727 1.00 29.27        C
ATOM   4092 CB  ALA B 234    29.965 41.558 49.621 1.00 29.31        C
ATOM   4096 C   ALA B 234    29.958 43.004 51.655 1.00 30.40        C
ATOM   4097 O   ALA B 234    29.882 44.210 51.552 1.00 29.95        O
ATOM   4098 N   GLN B 235    29.294 42.316 52.566 1.00 32.57        N
ATOM   4100 CA  GLN B 235    28.399 42.928 53.543 1.00 34.38        C
ATOM   4102 CB  GLN B 235    27.829 41.824 54.441 1.00 34.81        C
ATOM   4105 CG  GLN B 235    26.865 42.286 55.484 1.00 37.75        C
ATOM   4108 CD  GLN B 235    25.566 41.484 55.460 1.00 41.27        C
ATOM   4109 OE1 GLN B 235    25.504 40.371 56.026 1.00 42.65        O
ATOM   4110 NE2 GLN B 235    24.525 42.046 54.814 1.00 41.12        N
ATOM   4113 C   GLN B 235    29.145 43.957 54.375 1.00 34.95        C
ATOM   4114 O   GLN B 235    28.613 45.011 54.675 1.00 34.65        O
ATOM   4115 N   LEU B 236    30.389 43.615 54.715 1.00 36.32        N
ATOM   4117 CA  LEU B 236    31.262 44.414 55.564 1.00 37.34        C
ATOM   4119 CB  LEU B 236    32.433 43.559 56.017 1.00 37.63        C
ATOM   4122 CG  LEU B 236    32.509 43.208 57.493 1.00 38.70        C
ATOM   4124 CD1 LEU B 236    31.604 41.997 57.824 1.00 39.79        C
ATOM   4128 CD2 LEU B 236    33.960 42.926 57.797 1.00 38.57        C
ATOM   4132 C   LEU B 236    31.815 45.657 54.869 1.00 38.08        C
ATOM   4133 O   LEU B 236    31.855 46.726 55.461 1.00 37.92        O
ATOM   4134 N   GLN B 237    32.262 45.493 53.626 1.00 39.36        N
ATOM   4136 CA  GLN B 237    32.746 46.598 52.797 1.00 40.70        C
ATOM   4138 CB  GLN B 237    33.415 46.058 51.524 1.00 40.83        C
ATOM   4141 CG  GLN B 237    34.532 46.964 50.971 1.00 41.60        C
ATOM   4144 CD  GLN B 237    34.992 46.534 49.591 1.00 42.42        C
ATOM   4145 OE1 GLN B 237    34.170 46.108 48.764 1.00 42.22        O
ATOM   4146 NE2 GLN B 237    36.308 46.630 49.337 1.00 42.50        N
ATOM   4149 C   GLN B 237    31.632 47.602 52.424 1.00 41.89        C
ATOM   4150 O   GLN B 237    31.882 48.807 52.305 1.00 41.99        O
ATOM   4151 N   CYS B 238    30.413 47.104 52.241 1.00 43.32        N
ATOM   4153 CA  CYS B 238    29.246 47.954 52.013 1.00 44.73        C
ATOM   4155 CB  CYS B 238    28.069 47.119 51.513 1.00 44.86        C
ATOM   4158 SG  CYS B 238    28.396 46.553 49.839 1.00 46.85        S
ATOM   4159 C   CYS B 238    28.835 48.702 53.267 1.00 45.60        C
ATOM   4160 O   CYS B 238    28.345 49.828 53.170 1.00 46.06        O
ATOM   4161 N   ASN B 239    29.045 48.079 54.429 1.00 46.60        N
ATOM   4163 CA  ASN B 239    28.756 48.692 55.732 1.00 47.74        C
ATOM   4165 CB  ASN B 239    28.707 47.600 56.824 1.00 47.61        C
ATOM   4168 CG  ASN B 239    28.145 48.099 58.160 1.00 48.06        C
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| ATOM | 4169 | OD1 | ASN B 239 | 26.976 | 47.868 | 58.480 | 1.00 | 49.54 | O |
| ATOM | 4170 | ND2 | ASN B 239 | 28.986 | 48.764 | 58.954 | 1.00 | 48.17 | N |
| ATOM | 4173 | C | ASN B 239 | 29.743 | 49.820 | 56.132 | 1.00 | 48.99 | C |
| ATOM | 4174 | O | ASN B 239 | 29.520 | 50.493 | 57.140 | 1.00 | 49.79 | O |
| ATOM | 4175 | N | LYS B 240 | 30.828 | 50.030 | 55.377 | 1.00 | 50.23 | N |
| ATOM | 4177 | CA | LYS B 240 | 31.737 | 51.171 | 55.618 | 1.00 | 51.04 | C |
| ATOM | 4179 | CB | LYS B 240 | 33.089 | 50.963 | 54.917 | 1.00 | 51.14 | C |
| ATOM | 4182 | CG | LYS B 240 | 33.873 | 49.716 | 55.368 | 1.00 | 51.19 | C |
| ATOM | 4185 | CD | LYS B 240 | 34.958 | 49.321 | 54.340 | 1.00 | 51.44 | C |
| ATOM | 4188 | CE | LYS B 240 | 35.658 | 48.003 | 54.703 | 1.00 | 51.36 | C |
| ATOM | 4191 | NZ | LYS B 240 | 37.081 | 48.229 | 55.115 | 1.00 | 51.87 | N |
| ATOM | 4195 | C | LYS B 240 | 31.098 | 52.504 | 55.168 | 1.00 | 51.98 | C |
| ATOM | 4196 | O | LYS B 240 | 31.449 | 53.570 | 55.684 | 1.00 | 51.78 | O |
| ATOM | 4197 | N | ARG B 241 | 30.184 | 52.424 | 54.192 | 1.00 | 53.10 | N |
| ATOM | 4199 | CA | ARG B 241 | 29.218 | 53.500 | 53.891 | 1.00 | 54.14 | C |
| ATOM | 4201 | CB | ARG B 241 | 28.221 | 53.042 | 52.809 | 1.00 | 54.42 | C |
| ATOM | 4204 | CG | ARG B 241 | 27.434 | 54.178 | 52.132 | 1.00 | 55.90 | C |
| ATOM | 4207 | CD | ARG B 241 | 28.245 | 54.961 | 51.073 | 1.00 | 57.98 | C |
| ATOM | 4210 | NE | ARG B 241 | 27.427 | 55.921 | 50.318 | 1.00 | 59.30 | N |
| ATOM | 4212 | CZ | ARG B 241 | 27.611 | 57.250 | 50.276 | 1.00 | 60.60 | C |
| ATOM | 4213 | NH1 | ARG B 241 | 28.598 | 57.855 | 50.950 | 1.00 | 60.35 | N |
| ATOM | 4216 | NH2 | ARG B 241 | 26.784 | 57.993 | 49.545 | 1.00 | 61.55 | N |
| ATOM | 4219 | C | ARG B 241 | 28.423 | 53.954 | 55.135 | 1.00 | 54.58 | C |
| ATOM | 4220 | O | ARG B 241 | 28.148 | 55.141 | 55.293 | 1.00 | 54.62 | O |
| ATOM | 4221 | N | SER B 242 | 28.051 | 52.997 | 55.996 | 1.00 | 55.06 | N |
| ATOM | 4223 | CA | SER B 242 | 27.372 | 53.273 | 57.277 | 1.00 | 55.17 | C |
| ATOM | 4225 | CB | SER B 242 | 26.892 | 51.980 | 57.957 | 1.00 | 55.30 | C |
| ATOM | 4228 | OG | SER B 242 | 25.473 | 51.941 | 58.068 | 1.00 | 56.31 | O |
| ATOM | 4230 | C | SER B 242 | 28.211 | 54.049 | 58.288 | 1.00 | 55.24 | C |
| ATOM | 4231 | O | SER B 242 | 27.705 | 54.999 | 58.884 | 1.00 | 55.71 | O |
| ATOM | 4232 | N | PHE B 243 | 29.463 | 53.655 | 58.521 | 1.00 | 55.12 | N |
| ATOM | 4234 | CA | PHE B 243 | 30.259 | 54.359 | 59.534 | 1.00 | 55.08 | C |
| ATOM | 4236 | CB | PHE B 243 | 31.418 | 53.497 | 60.052 | 1.00 | 55.12 | C |
| ATOM | 4239 | CG | PHE B 243 | 31.996 | 53.987 | 61.364 | 1.00 | 56.27 | C |
| ATOM | 4240 | CD1 | PHE B 243 | 31.181 | 54.146 | 62.493 | 1.00 | 57.56 | C |
| ATOM | 4242 | CE1 | PHE B 243 | 31.719 | 54.624 | 63.733 | 1.00 | 57.97 | C |
| ATOM | 4244 | CZ | PHE B 243 | 33.083 | 54.941 | 63.831 | 1.00 | 57.54 | C |
| ATOM | 4246 | CE2 | PHE B 243 | 33.905 | 54.785 | 62.705 | 1.00 | 57.44 | C |
| ATOM | 4248 | CD2 | PHE B 243 | 33.356 | 54.313 | 61.473 | 1.00 | 57.17 | C |
| ATOM | 4250 | C | PHE B 243 | 30.746 | 55.749 | 59.061 | 1.00 | 54.73 | C |
| ATOM | 4251 | O | PHE B 243 | 30.825 | 56.679 | 59.865 | 1.00 | 55.07 | O |
| ATOM | 4252 | N | SER B 244 | 31.027 | 55.904 | 57.767 | 1.00 | 54.22 | N |
| ATOM | 4254 | CA | SER B 244 | 31.487 | 57.191 | 57.211 | 1.00 | 53.75 | C |
| ATOM | 4256 | CB | SER B 244 | 32.064 | 57.008 | 55.793 | 1.00 | 53.77 | C |
| ATOM | 4259 | OG | SER B 244 | 31.290 | 57.702 | 54.822 | 1.00 | 53.38 | O |
| ATOM | 4261 | C | SER B 244 | 30.385 | 58.262 | 57.176 | 1.00 | 53.38 | C |
| ATOM | 4262 | O | SER B 244 | 30.627 | 59.418 | 57.535 | 1.00 | 53.00 | O |
| ATOM | 4263 | N | ASP B 245 | 29.188 | 57.855 | 56.732 | 1.00 | 53.11 | N |

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ATOM  4265 CA  ASP B 245   28.019 58.748 56.567 1.00 52.82      C
ATOM  4267 CB  ASP B 245   27.074 58.230 55.443 1.00 52.94      C
ATOM  4270 CG  ASP B 245   27.614 58.476 54.002 1.00 53.62      C
ATOM  4271 OD1 ASP B 245   28.098 59.587 53.682 1.00 55.16      O
ATOM  4272 OD2 ASP B 245   27.548 57.610 53.105 1.00 52.73      O
ATOM  4273 C   ASP B 245   27.179 58.946 57.855 1.00 52.05      C
ATOM  4274 O   ASP B 245   26.117 59.572 57.805 1.00 52.02      O
ATOM  4275 N   GLN B 246   27.652 58.422 58.988 1.00 51.15      N
ATOM  4277 CA  GLN B 246   26.926 58.504 60.267 1.00 50.54      C
ATOM  4279 CB  GLN B 246   27.492 57.455 61.269 1.00 50.73      C
ATOM  4282 CG  GLN B 246   27.233 57.722 62.765 1.00 51.69      C
ATOM  4285 CD  GLN B 246   27.645 56.547 63.672 1.00 53.24      C
ATOM  4286 OE1 GLN B 246   28.817 56.436 64.073 1.00 54.34      O
ATOM  4287 NE2 GLN B 246   26.679 55.685 64.010 1.00 53.27      N
ATOM  4290 C   GLN B 246   26.862 59.957 60.851 1.00 49.48      C
ATOM  4291 O   GLN B 246   25.763 60.470 61.101 1.00 49.52      O
ATOM  4292 N   PRO B 247   28.000 60.615 61.094 1.00 47.95      N
ATOM  4293 CA  PRO B 247   27.991 62.064 61.394 1.00 46.90      C
ATOM  4295 CB  PRO B 247   29.467 62.362 61.741 1.00 47.00      C
ATOM  4298 CG  PRO B 247   30.042 61.036 62.140 1.00 47.48      C
ATOM  4301 CD  PRO B 247   29.359 60.046 61.223 1.00 47.92      C
ATOM  4304 C   PRO B 247   27.476 63.045 60.296 1.00 45.54      C
ATOM  4305 O   PRO B 247   27.150 64.182 60.635 1.00 45.34      O
ATOM  4306 N   LYS B 248   27.396 62.644 59.032 1.00 43.94      N
ATOM  4308 CA  LYS B 248   26.860 63.543 57.990 1.00 42.75      C
ATOM  4310 CB  LYS B 248   27.141 62.964 56.593 1.00 43.13      C
ATOM  4313 CG  LYS B 248   28.639 62.768 56.264 1.00 44.00      C
ATOM  4316 CD  LYS B 248   28.852 62.542 54.752 1.00 44.70      C
ATOM  4319 CE  LYS B 248   30.091 61.695 54.450 1.00 44.85      C
ATOM  4322 NZ  LYS B 248   30.151 61.296 53.010 1.00 44.31      N
ATOM  4326 C   LYS B 248   25.340 63.827 58.140 1.00 40.90      C
ATOM  4327 O   LYS B 248   24.845 64.869 57.686 1.00 40.99      O
ATOM  4328 N   VAL B 249   24.636 62.901 58.797 1.00 38.30      N
ATOM  4330 CA  VAL B 249   23.173 62.868 58.906 1.00 36.28      C
ATOM  4332 CB  VAL B 249   22.743 61.474 59.484 1.00 36.31      C
ATOM  4334 CG1 VAL B 249   21.274 61.419 59.906 1.00 36.23      C
ATOM  4338 CG2 VAL B 249   23.031 60.379 58.478 1.00 36.31      C
ATOM  4342 C   VAL B 249   22.576 63.984 59.767 1.00 34.54      C
ATOM  4343 O   VAL B 249   23.245 64.523 60.642 1.00 34.40      O
ATOM  4344 N   THR B 250   21.311 64.318 59.495 1.00 32.57      N
ATOM  4346 CA  THR B 250   20.513 65.209 60.341 1.00 31.14      C
ATOM  4348 CB  THR B 250   19.124 65.442 59.743 1.00 31.02      C
ATOM  4350 OG1 THR B 250   19.234 66.102 58.486 1.00 31.14      O
ATOM  4352 CG2 THR B 250   18.310 66.419 60.602 1.00 31.00      C
ATOM  4356 C   THR B 250   20.326 64.594 61.720 1.00 29.95      C
ATOM  4357 O   THR B 250   19.559 63.644 61.896 1.00 29.50      O
ATOM  4358 N   PRO B 251   20.989 65.144 62.720 1.00 28.66      N
ATOM  4359 CA  PRO B 251   20.950 64.526 64.051 1.00 27.87      C
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ATOM  4361  CB  PRO B 251    21.874 65.426 64.886  1.00 27.94        C
ATOM  4364  CG  PRO B 251    22.682 66.181 63.888  1.00 28.33        C
ATOM  4367  CD  PRO B 251    21.791 66.380 62.703  1.00 28.63        C
ATOM  4370  C   PRO B 251    19.522 64.463 64.632  1.00 26.71        C
ATOM  4371  O   PRO B 251    18.680 65.312 64.335  1.00 26.64        O
ATOM  4372  N   TRP B 252    19.263 63.438 65.437  1.00 25.29        N
ATOM  4374  CA  TRP B 252    17.951 63.234 66.046  1.00 23.97        C
ATOM  4376  CB  TRP B 252    17.937 61.878 66.763  1.00 23.92        C
ATOM  4379  CG  TRP B 252    16.605 61.421 67.350  1.00 22.64        C
ATOM  4380  CD1 TRP B 252    16.189 61.540 68.656  1.00 21.21        C
ATOM  4382  NE1 TRP B 252    14.938 60.987 68.802  1.00 20.46        N
ATOM  4384  CE2 TRP B 252    14.520 60.492 67.595  1.00 18.51        C
ATOM  4385  CD2 TRP B 252    15.550 60.747 66.655  1.00 19.31        C
ATOM  4386  CE3 TRP B 252    15.353 60.364 65.323  1.00 17.21        C
ATOM  4388  CZ3 TRP B 252    14.164 59.740 64.978  1.00 16.72        C
ATOM  4390  CH2 TRP B 252    13.156 59.497 65.934  1.00 16.41        C
ATOM  4392  CZ2 TRP B 252    13.310 59.868 67.243  1.00 17.52        C
ATOM  4394  C   TRP B 252    17.730 64.380 67.013  1.00 22.87        C
ATOM  4395  O   TRP B 252    18.638 64.692 67.751  1.00 22.53        O
ATOM  4396  N   PRO B 253    16.565 65.033 66.983  1.00 22.23        N
ATOM  4397  CA  PRO B 253    16.339 66.235 67.787  1.00 22.20        C
ATOM  4399  CB  PRO B 253    15.033 66.803 67.198  1.00 21.68        C
ATOM  4402  CG  PRO B 253    14.333 65.675 66.691  1.00 21.51        C
ATOM  4405  CD  PRO B 253    15.376 64.726 66.170  1.00 22.10        C
ATOM  4408  C   PRO B 253    16.217 66.014 69.315  1.00 22.42        C
ATOM  4409  O   PRO B 253    15.242 65.429 69.778  1.00 22.73        O
ATOM  4410  N   LEU B 254    17.195 66.511 70.065  1.00 22.50        N
ATOM  4412  CA  LEU B 254    17.164 66.496 71.516  1.00 23.12        C
ATOM  4414  CB  LEU B 254    18.599 66.485 72.041  1.00 23.09        C
ATOM  4417  CG  LEU B 254    19.552 65.465 71.399  1.00 23.03        C
ATOM  4419  CD1 LEU B 254    20.903 65.473 72.136  1.00 23.36        C
ATOM  4423  CD2 LEU B 254    18.948 64.066 71.382  1.00 21.36        C
ATOM  4427  C   LEU B 254    16.436 67.733 72.041  1.00 23.58        C
ATOM  4428  O   LEU B 254    16.501 68.767 71.422  1.00 23.69        O
ATOM  4429  N   GLY B 255    15.724 67.619 73.156  1.00 24.43        N
ATOM  4431  CA  GLY B 255    15.173 68.775 73.850  1.00 25.36        C
ATOM  4434  C   GLY B 255    13.829 69.324 73.397  1.00 26.48        C
ATOM  4435  O   GLY B 255    13.453 70.400 73.837  1.00 26.18        O
ATOM  4436  N   ALA B 256    13.094 68.573 72.572  1.00 28.31        N
ATOM  4438  CA  ALA B 256    11.885 69.060 71.870  1.00 29.71        C
ATOM  4440  CB  ALA B 256    11.624 68.177 70.650  1.00 29.61        C
ATOM  4444  C   ALA B 256    10.597 69.136 72.719  1.00 31.22        C
ATOM  4445  O   ALA B 256    10.383 68.285 73.582  1.00 31.35        O
ATOM  4446  N   ASP B 257     9.733 70.131 72.433  1.00 33.04        N
ATOM  4448  CA  ASP B 257     8.375 70.269 73.051  1.00 34.35        C
ATOM  4450  CB  ASP B 257     7.821 71.731 73.009  1.00 34.35        C
ATOM  4453  CG  ASP B 257     8.880 72.813 73.128  1.00 34.61        C
ATOM  4454  OD1 ASP B 257     9.055 73.350 74.248  1.00 34.01        O
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| ATOM | 4455 | OD2 | ASP B 257 | 9.524 | 73.240 | 72.141 | 1.00 | 35.06 | O |
|------|------|-----|-----------|-------|--------|--------|------|-------|---|
| ATOM | 4456 | C   | ASP B 257 | 7.361 | 69.306 | 72.349 | 1.00 | 35.52 | C |
| ATOM | 4457 | O   | ASP B 257 | 7.794 | 68.366 | 71.645 | 1.00 | 36.06 | O |
| ATOM | 4458 | N   | PRO B 258 | 6.037 | 69.522 | 72.491 | 1.00 | 36.59 | N |
| ATOM | 4459 | CA  | PRO B 258 | 5.056 | 68.687 | 71.765 | 1.00 | 37.00 | C |
| ATOM | 4461 | CB  | PRO B 258 | 3.853 | 69.637 | 71.622 | 1.00 | 37.07 | C |
| ATOM | 4464 | CG  | PRO B 258 | 3.865 | 70.424 | 72.945 | 1.00 | 37.12 | C |
| ATOM | 4467 | CD  | PRO B 258 | 5.332 | 70.530 | 73.324 | 1.00 | 36.62 | C |
| ATOM | 4470 | C   | PRO B 258 | 5.507 | 68.146 | 70.392 | 1.00 | 37.02 | C |
| ATOM | 4471 | O   | PRO B 258 | 5.474 | 68.872 | 69.394 | 1.00 | 37.05 | O |
| ATOM | 4472 | N   | ALA B 261 | 5.933 | 71.527 | 65.790 | 1.00 | 23.53 | N |
| ATOM | 4474 | CA  | ALA B 261 | 5.885 | 70.485 | 64.784 | 1.00 | 23.40 | C |
| ATOM | 4476 | CB  | ALA B 261 | 4.724 | 70.738 | 63.850 | 1.00 | 23.75 | C |
| ATOM | 4480 | C   | ALA B 261 | 7.209 | 70.402 | 63.997 | 1.00 | 23.27 | C |
| ATOM | 4481 | O   | ALA B 261 | 7.431 | 69.440 | 63.219 | 1.00 | 22.81 | O |
| ATOM | 4482 | N   | ASP B 262 | 8.056 | 71.421 | 64.200 | 1.00 | 22.75 | N |
| ATOM | 4484 | CA  | ASP B 262 | 9.483 | 71.415 | 63.837 | 1.00 | 22.57 | C |
| ATOM | 4486 | CB  | ASP B 262 | 10.210 | 72.484 | 64.669 | 1.00 | 22.41 | C |
| ATOM | 4489 | CG  | ASP B 262 | 11.361 | 73.132 | 63.935 | 1.00 | 22.49 | C |
| ATOM | 4490 | OD1 | ASP B 262 | 11.983 | 72.476 | 63.082 | 1.00 | 22.83 | O |
| ATOM | 4491 | OD2 | ASP B 262 | 11.726 | 74.303 | 64.160 | 1.00 | 21.66 | O |
| ATOM | 4492 | C   | ASP B 262 | 10.186 | 70.036 | 64.021 | 1.00 | 22.69 | C |
| ATOM | 4493 | O   | ASP B 262 | 10.640 | 69.427 | 63.040 | 1.00 | 22.60 | O |
| ATOM | 4494 | N   | ALA B 263 | 10.259 | 69.542 | 65.265 | 1.00 | 22.63 | N |
| ATOM | 4496 | CA  | ALA B 263 | 10.984 | 68.300 | 65.589 | 1.00 | 22.14 | C |
| ATOM | 4498 | CB  | ALA B 263 | 11.027 | 68.104 | 67.078 | 1.00 | 22.25 | C |
| ATOM | 4502 | C   | ALA B 263 | 10.422 | 67.041 | 64.923 | 1.00 | 22.12 | C |
| ATOM | 4503 | O   | ALA B 263 | 11.153 | 66.073 | 64.671 | 1.00 | 21.57 | O |
| ATOM | 4504 | N   | ARG B 264 | 9.124 | 67.053 | 64.647 | 1.00 | 22.30 | N |
| ATOM | 4506 | CA  | ARG B 264 | 8.460 | 65.917 | 63.998 | 1.00 | 22.71 | C |
| ATOM | 4508 | CB  | ARG B 264 | 6.940 | 66.161 | 63.951 | 1.00 | 23.47 | C |
| ATOM | 4511 | CG  | ARG B 264 | 6.098 | 65.046 | 64.548 | 1.00 | 26.53 | C |
| ATOM | 4514 | CD  | ARG B 264 | 5.610 | 63.988 | 63.526 | 1.00 | 30.96 | C |
| ATOM | 4517 | NE  | ARG B 264 | 4.850 | 62.928 | 64.200 | 1.00 | 35.24 | N |
| ATOM | 4519 | CZ  | ARG B 264 | 3.593 | 63.049 | 64.663 | 1.00 | 38.99 | C |
| ATOM | 4520 | NH1 | ARG B 264 | 2.910 | 64.189 | 64.501 | 1.00 | 40.61 | N |
| ATOM | 4523 | NH2 | ARG B 264 | 3.006 | 62.017 | 65.285 | 1.00 | 39.67 | N |
| ATOM | 4526 | C   | ARG B 264 | 9.018 | 65.681 | 62.576 | 1.00 | 21.70 | C |
| ATOM | 4527 | O   | ARG B 264 | 9.176 | 64.540 | 62.145 | 1.00 | 21.68 | O |
| ATOM | 4528 | N   | GLN B 265 | 9.293 | 66.789 | 61.879 | 1.00 | 20.57 | N |
| ATOM | 4530 | CA  | GLN B 265 | 9.890 | 66.828 | 60.544 | 1.00 | 19.35 | C |
| ATOM | 4532 | CB  | GLN B 265 | 9.780 | 68.263 | 59.958 | 1.00 | 19.49 | C |
| ATOM | 4535 | CG  | GLN B 265 | 9.099 | 68.373 | 58.576 | 1.00 | 21.01 | C |
| ATOM | 4538 | CD  | GLN B 265 | 9.776 | 67.519 | 57.471 | 1.00 | 21.91 | C |
| ATOM | 4539 | OE1 | GLN B 265 | 9.158 | 66.607 | 56.923 | 1.00 | 21.19 | O |
| ATOM | 4540 | NE2 | GLN B 265 | 11.038 | 67.828 | 57.154 | 1.00 | 23.36 | N |
| ATOM | 4543 | C   | GLN B 265 | 11.358 | 66.407 | 60.552 | 1.00 | 18.25 | C |
| ATOM | 4544 | O   | GLN B 265 | 11.833 | 65.794 | 59.599 | 1.00 | 17.63 | O |

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| ATOM | 4545 | N | GLN B 266 | 12.086 66.775 61.607 1.00 17.43 | N |
| ATOM | 4547 | CA | GLN B 266 | 13.534 66.520 61.670 1.00 16.68 | C |
| ATOM | 4549 | CB | GLN B 266 | 14.210 67.367 62.778 1.00 16.42 | C |
| ATOM | 4552 | CG | GLN B 266 | 15.749 67.521 62.603 1.00 17.00 | C |
| ATOM | 4555 | CD | GLN B 266 | 16.443 68.236 63.777 1.00 17.14 | C |
| ATOM | 4556 | OE1 | GLN B 266 | 16.095 69.363 64.093 1.00 18.61 | O |
| ATOM | 4557 | NE2 | GLN B 266 | 17.422 67.586 64.402 1.00 15.38 | N |
| ATOM | 4560 | C | GLN B 266 | 13.791 65.019 61.862 1.00 15.63 | C |
| ATOM | 4561 | O | GLN B 266 | 14.673 64.433 61.224 1.00 14.42 | O |
| ATOM | 4562 | N | ARG B 267 | 13.004 64.420 62.753 1.00 15.02 | N |
| ATOM | 4564 | CA | ARG B 267 | 13.029 62.981 62.986 1.00 14.67 | C |
| ATOM | 4566 | CB | ARG B 267 | 12.005 62.592 64.037 1.00 14.62 | C |
| ATOM | 4569 | CG | ARG B 267 | 12.304 63.045 65.428 1.00 15.59 | C |
| ATOM | 4572 | CD | ARG B 267 | 11.209 62.632 66.388 1.00 17.40 | C |
| ATOM | 4575 | NE | ARG B 267 | 11.338 63.258 67.702 1.00 18.98 | N |
| ATOM | 4577 | CZ | ARG B 267 | 10.404 63.991 68.299 1.00 20.96 | C |
| ATOM | 4578 | NH1 | ARG B 267 | 9.240 64.242 67.704 1.00 22.06 | N |
| ATOM | 4581 | NH2 | ARG B 267 | 10.641 64.494 69.505 1.00 21.26 | N |
| ATOM | 4584 | C | ARG B 267 | 12.666 62.248 61.711 1.00 14.38 | C |
| ATOM | 4585 | O | ARG B 267 | 13.279 61.232 61.376 1.00 14.37 | O |
| ATOM | 4586 | N | PHE B 268 | 11.640 62.741 61.016 1.00 13.88 | N |
| ATOM | 4588 | CA | PHE B 268 | 11.271 62.153 59.748 1.00 13.74 | C |
| ATOM | 4590 | CB | PHE B 268 | 9.980 62.728 59.155 1.00 13.86 | C |
| ATOM | 4593 | CG | PHE B 268 | 9.592 62.052 57.858 1.00 15.91 | C |
| ATOM | 4594 | CD1 | PHE B 268 | 9.120 60.735 57.866 1.00 16.22 | C |
| ATOM | 4596 | CE1 | PHE B 268 | 8.814 60.083 56.684 1.00 17.48 | C |
| ATOM | 4598 | CZ | PHE B 268 | 8.991 60.739 55.470 1.00 18.77 | C |
| ATOM | 4600 | CE2 | PHE B 268 | 9.475 62.059 55.443 1.00 17.57 | C |
| ATOM | 4602 | CD2 | PHE B 268 | 9.781 62.700 56.626 1.00 17.00 | C |
| ATOM | 4604 | C | PHE B 268 | 12.427 62.256 58.743 1.00 12.92 | C |
| ATOM | 4605 | O | PHE B 268 | 12.834 61.260 58.184 1.00 13.32 | O |
| ATOM | 4606 | N | ALA B 269 | 12.946 63.450 58.522 1.00 12.15 | N |
| ATOM | 4608 | CA | ALA B 269 | 14.138 63.637 57.709 1.00 11.93 | C |
| ATOM | 4610 | CB | ALA B 269 | 14.626 65.064 57.821 1.00 11.98 | C |
| ATOM | 4614 | C | ALA B 269 | 15.253 62.681 58.096 1.00 11.93 | C |
| ATOM | 4615 | O | ALA B 269 | 15.867 62.076 57.228 1.00 11.90 | O |
| ATOM | 4616 | N | HIS B 270 | 15.491 62.520 59.396 1.00 12.21 | N |
| ATOM | 4618 | CA | HIS B 270 | 16.558 61.652 59.892 1.00 12.77 | C |
| ATOM | 4620 | CB | HIS B 270 | 16.608 61.703 61.422 1.00 13.05 | C |
| ATOM | 4623 | CG | HIS B 270 | 17.682 60.857 62.044 1.00 13.82 | C |
| ATOM | 4624 | ND1 | HIS B 270 | 18.985 61.290 62.193 1.00 14.63 | N |
| ATOM | 4626 | CE1 | HIS B 270 | 19.693 60.351 62.798 1.00 14.72 | C |
| ATOM | 4628 | NE2 | HIS B 270 | 18.894 59.333 63.065 1.00 14.64 | N |
| ATOM | 4630 | CD2 | HIS B 270 | 17.628 59.629 62.614 1.00 14.16 | C |
| ATOM | 4632 | C | HIS B 270 | 16.372 60.219 59.402 1.00 13.02 | C |
| ATOM | 4633 | O | HIS B 270 | 17.323 59.605 58.948 1.00 13.03 | O |
| ATOM | 4634 | N | PHE B 271 | 15.135 59.728 59.477 1.00 13.50 | N |
| ATOM | 4636 | CA | PHE B 271 | 14.764 58.374 59.086 1.00 14.17 | C |

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| ATOM | 4638 | CB | PHE | B 271 | 13.295 | 58.092 | 59.458 | 1.00 | 14.50 | C |
|------|------|-----|-----|-------|--------|--------|--------|------|-------|---|
| ATOM | 4641 | CG | PHE | B 271 | 13.095 | 57.360 | 60.784 | 1.00 | 15.95 | C |
| ATOM | 4642 | CD1 | PHE | B 271 | 13.797 | 57.709 | 61.926 | 1.00 | 17.54 | C |
| ATOM | 4644 | CE1 | PHE | B 271 | 13.596 | 57.045 | 63.129 | 1.00 | 18.13 | C |
| ATOM | 4646 | CZ | PHE | B 271 | 12.689 | 56.049 | 63.224 | 1.00 | 19.25 | C |
| ATOM | 4648 | CE2 | PHE | B 271 | 11.964 | 55.678 | 62.103 | 1.00 | 20.36 | C |
| ATOM | 4650 | CD2 | PHE | B 271 | 12.166 | 56.348 | 60.885 | 1.00 | 18.41 | C |
| ATOM | 4652 | C | PHE | B 271 | 14.936 | 58.168 | 57.583 | 1.00 | 14.72 | C |
| ATOM | 4653 | O | PHE | B 271 | 15.368 | 57.086 | 57.140 | 1.00 | 15.05 | O |
| ATOM | 4654 | N | THR | B 272 | 14.599 | 59.198 | 56.797 | 1.00 | 15.02 | N |
| ATOM | 4656 | CA | THR | B 272 | 14.748 | 59.149 | 55.328 | 1.00 | 14.87 | C |
| ATOM | 4658 | CB | THR | B 272 | 14.101 | 60.368 | 54.642 | 1.00 | 14.56 | C |
| ATOM | 4660 | OG1 | THR | B 272 | 14.749 | 61.567 | 55.057 | 1.00 | 12.34 | O |
| ATOM | 4662 | CG2 | THR | B 272 | 12.651 | 60.545 | 55.069 | 1.00 | 14.67 | C |
| ATOM | 4666 | C | THR | B 272 | 16.219 | 59.109 | 54.961 | 1.00 | 15.29 | C |
| ATOM | 4667 | O | THR | B 272 | 16.640 | 58.450 | 54.001 | 1.00 | 14.04 | O |
| ATOM | 4668 | N | GLU | B 273 | 16.997 | 59.818 | 55.764 | 1.00 | 16.21 | N |
| ATOM | 4670 | CA | GLU | B 273 | 18.405 | 59.963 | 55.485 | 1.00 | 17.15 | C |
| ATOM | 4672 | CB | GLU | B 273 | 18.992 | 61.146 | 56.242 | 1.00 | 17.12 | C |
| ATOM | 4675 | CG | GLU | B 273 | 18.835 | 62.413 | 55.419 | 1.00 | 18.24 | C |
| ATOM | 4678 | CD | GLU | B 273 | 19.309 | 63.646 | 56.145 | 1.00 | 20.25 | C |
| ATOM | 4679 | OE1 | GLU | B 273 | 18.516 | 64.607 | 56.299 | 1.00 | 21.67 | O |
| ATOM | 4680 | OE2 | GLU | B 273 | 20.479 | 63.646 | 56.548 | 1.00 | 20.79 | O |
| ATOM | 4681 | C | GLU | B 273 | 19.148 | 58.674 | 55.741 | 1.00 | 17.51 | C |
| ATOM | 4682 | O | GLU | B 273 | 20.086 | 58.355 | 55.009 | 1.00 | 18.09 | O |
| ATOM | 4683 | N | LEU | B 274 | 18.716 | 57.915 | 56.740 | 1.00 | 17.88 | N |
| ATOM | 4685 | CA | LEU | B 274 | 19.280 | 56.589 | 56.962 | 1.00 | 18.24 | C |
| ATOM | 4687 | CB | LEU | B 274 | 18.919 | 56.064 | 58.345 | 1.00 | 18.44 | C |
| ATOM | 4690 | CG | LEU | B 274 | 19.333 | 56.898 | 59.559 | 1.00 | 20.02 | C |
| ATOM | 4692 | CD1 | LEU | B 274 | 18.910 | 56.182 | 60.858 | 1.00 | 21.07 | C |
| ATOM | 4696 | CD2 | LEU | B 274 | 20.825 | 57.222 | 59.575 | 1.00 | 21.28 | C |
| ATOM | 4700 | C | LEU | B 274 | 18.811 | 55.611 | 55.880 | 1.00 | 17.93 | C |
| ATOM | 4701 | O | LEU | B 274 | 19.575 | 54.755 | 55.458 | 1.00 | 17.46 | O |
| ATOM | 4702 | N | ALA | B 275 | 17.562 | 55.768 | 55.431 | 1.00 | 17.83 | N |
| ATOM | 4704 | CA | ALA | B 275 | 16.987 | 54.924 | 54.386 | 1.00 | 17.37 | C |
| ATOM | 4706 | CB | ALA | B 275 | 15.553 | 55.269 | 54.142 | 1.00 | 16.76 | C |
| ATOM | 4710 | C | ALA | B 275 | 17.778 | 55.084 | 53.118 | 1.00 | 18.01 | C |
| ATOM | 4711 | O | ALA | B 275 | 18.088 | 54.097 | 52.466 | 1.00 | 18.14 | O |
| ATOM | 4712 | N | ILE | B 276 | 18.107 | 56.330 | 52.770 | 1.00 | 18.68 | N |
| ATOM | 4714 | CA | ILE | B 276 | 18.945 | 56.613 | 51.623 | 1.00 | 18.96 | C |
| ATOM | 4716 | CB | ILE | B 276 | 19.214 | 58.142 | 51.475 | 1.00 | 19.22 | C |
| ATOM | 4718 | CG1 | ILE | B 276 | 17.991 | 58.845 | 50.882 | 1.00 | 18.43 | C |
| ATOM | 4721 | CD1 | ILE | B 276 | 18.007 | 60.347 | 51.022 | 1.00 | 17.60 | C |
| ATOM | 4725 | CG2 | ILE | B 276 | 20.450 | 58.409 | 50.592 | 1.00 | 19.31 | C |
| ATOM | 4729 | C | ILE | B 276 | 20.244 | 55.857 | 51.784 | 1.00 | 19.67 | C |
| ATOM | 4730 | O | ILE | B 276 | 20.620 | 55.113 | 50.901 | 1.00 | 20.42 | O |
| ATOM | 4731 | N | ILE | B 277 | 20.919 | 56.016 | 52.918 | 1.00 | 20.23 | N |
| ATOM | 4733 | CA | ILE | B 277 | 22.206 | 55.341 | 53.135 | 1.00 | 20.68 | C |

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| ATOM | 4735 | CB | ILE B 277 | 22.748 55.641 54.560 1.00 20.48 | C |
|---|---|---|---|---|---|
| ATOM | 4737 | CG1 | ILE B 277 | 23.202 57.085 54.641 1.00 20.58 | C |
| ATOM | 4740 | CD1 | ILE B 277 | 23.112 57.656 56.037 1.00 21.64 | C |
| ATOM | 4744 | CG2 | ILE B 277 | 23.908 54.755 54.926 1.00 20.23 | C |
| ATOM | 4748 | C | ILE B 277 | 22.064 53.836 52.885 1.00 21.24 | C |
| ATOM | 4749 | O | ILE B 277 | 22.933 53.218 52.296 1.00 21.33 | O |
| ATOM | 4750 | N | SER B 278 | 20.948 53.264 53.312 1.00 22.00 | N |
| ATOM | 4752 | CA | SER B 278 | 20.710 51.835 53.182 1.00 22.97 | C |
| ATOM | 4754 | CB | SER B 278 | 19.534 51.411 54.085 1.00 23.45 | C |
| ATOM | 4757 | OG | SER B 278 | 19.807 50.198 54.786 1.00 26.12 | O |
| ATOM | 4759 | C | SER B 278 | 20.472 51.437 51.709 1.00 22.73 | C |
| ATOM | 4760 | O | SER B 278 | 20.951 50.399 51.241 1.00 22.40 | O |
| ATOM | 4761 | N | VAL B 279 | 19.751 52.277 50.979 1.00 22.57 | N |
| ATOM | 4763 | CA | VAL B 279 | 19.488 52.021 49.573 1.00 22.50 | C |
| ATOM | 4765 | CB | VAL B 279 | 18.607 53.116 48.929 1.00 22.38 | C |
| ATOM | 4767 | CG1 | VAL B 279 | 18.448 52.853 47.461 1.00 21.66 | C |
| ATOM | 4771 | CG2 | VAL B 279 | 17.214 53.181 49.587 1.00 22.01 | C |
| ATOM | 4775 | C | VAL B 279 | 20.811 51.942 48.829 1.00 22.93 | C |
| ATOM | 4776 | O | VAL B 279 | 21.018 51.066 48.020 1.00 23.53 | O |
| ATOM | 4777 | N | GLN B 280 | 21.719 52.854 49.118 1.00 23.29 | N |
| ATOM | 4779 | CA | GLN B 280 | 23.000 52.877 48.448 1.00 23.37 | C |
| ATOM | 4781 | CB | GLN B 280 | 23.704 54.221 48.665 1.00 23.57 | C |
| ATOM | 4784 | CG | GLN B 280 | 22.869 55.415 48.141 1.00 25.84 | C |
| ATOM | 4787 | CD | GLN B 280 | 23.391 56.815 48.571 1.00 30.13 | C |
| ATOM | 4788 | OE1 | GLN B 280 | 23.752 57.035 49.747 1.00 32.29 | O |
| ATOM | 4789 | NE2 | GLN B 280 | 23.406 57.766 47.620 1.00 30.97 | N |
| ATOM | 4792 | C | GLN B 280 | 23.850 51.686 48.887 1.00 23.22 | C |
| ATOM | 4793 | O | GLN B 280 | 24.576 51.160 48.066 1.00 23.71 | O |
| ATOM | 4794 | N | GLU B 281 | 23.756 51.245 50.146 1.00 23.05 | N |
| ATOM | 4796 | CA | GLU B 281 | 24.459 50.031 50.609 1.00 23.19 | C |
| ATOM | 4798 | CB | GLU B 281 | 24.302 49.865 52.125 1.00 23.69 | C |
| ATOM | 4801 | CG | GLU B 281 | 25.233 50.720 52.963 1.00 27.14 | C |
| ATOM | 4804 | CD | GLU B 281 | 25.101 50.516 54.491 1.00 31.62 | C |
| ATOM | 4805 | OE1 | GLU B 281 | 24.386 49.589 54.988 1.00 33.36 | O |
| ATOM | 4806 | OE2 | GLU B 281 | 25.735 51.323 55.212 1.00 34.33 | O |
| ATOM | 4807 | C | GLU B 281 | 23.932 48.741 49.928 1.00 22.41 | C |
| ATOM | 4808 | O | GLU B 281 | 24.666 47.794 49.682 1.00 21.37 | O |
| ATOM | 4809 | N | ILE B 282 | 22.636 48.715 49.655 1.00 21.99 | N |
| ATOM | 4811 | CA | ILE B 282 | 22.018 47.576 49.041 1.00 21.73 | C |
| ATOM | 4813 | CB | ILE B 282 | 20.518 47.612 49.272 1.00 21.40 | C |
| ATOM | 4815 | CG1 | ILE B 282 | 20.200 47.370 50.747 1.00 20.60 | C |
| ATOM | 4818 | CD1 | ILE B 282 | 18.743 47.703 51.106 1.00 20.68 | C |
| ATOM | 4822 | CG2 | ILE B 282 | 19.849 46.556 48.433 1.00 21.56 | C |
| ATOM | 4826 | C | ILE B 282 | 22.356 47.550 47.543 1.00 21.93 | C |
| ATOM | 4827 | O | ILE B 282 | 22.505 46.473 46.962 1.00 22.72 | O |
| ATOM | 4828 | N | VAL B 283 | 22.486 48.715 46.919 1.00 21.41 | N |
| ATOM | 4830 | CA | VAL B 283 | 22.930 48.769 45.539 1.00 21.34 | C |
| ATOM | 4832 | CB | VAL B 283 | 22.949 50.210 44.985 1.00 21.18 | C |

| ATOM | 4834 | CG1 | VAL | B | 283 | 23.718 | 50.294 | 43.702 | 1.00 | 21.22 | C |
| ATOM | 4838 | CG2 | VAL | B | 283 | 21.549 | 50.693 | 44.747 | 1.00 | 21.12 | C |
| ATOM | 4842 | C | VAL | B | 283 | 24.311 | 48.160 | 45.478 | 1.00 | 21.51 | C |
| ATOM | 4843 | O | VAL | B | 283 | 24.513 | 47.153 | 44.831 | 1.00 | 21.40 | O |
| ATOM | 4844 | N | ASP | B | 284 | 25.244 | 48.783 | 46.196 | 1.00 | 22.34 | N |
| ATOM | 4846 | CA | ASP | B | 284 | 26.652 | 48.375 | 46.304 | 1.00 | 22.25 | C |
| ATOM | 4848 | CB | ASP | B | 284 | 27.385 | 49.244 | 47.360 | 1.00 | 22.76 | C |
| ATOM | 4851 | CG | ASP | B | 284 | 27.596 | 50.726 | 46.915 | 1.00 | 25.07 | C |
| ATOM | 4852 | OD1 | ASP | B | 284 | 28.189 | 51.505 | 47.712 | 1.00 | 27.18 | O |
| ATOM | 4853 | OD2 | ASP | B | 284 | 27.214 | 51.208 | 45.809 | 1.00 | 28.63 | O |
| ATOM | 4854 | C | ASP | B | 284 | 26.788 | 46.890 | 46.638 | 1.00 | 21.52 | C |
| ATOM | 4855 | O | ASP | B | 284 | 27.562 | 46.213 | 46.021 | 1.00 | 21.44 | O |
| ATOM | 4856 | N | PHE | B | 285 | 26.010 | 46.386 | 47.586 | 1.00 | 21.54 | N |
| ATOM | 4858 | CA | PHE | B | 285 | 26.003 | 44.958 | 47.926 | 1.00 | 21.74 | C |
| ATOM | 4860 | CB | PHE | B | 285 | 25.005 | 44.667 | 49.037 | 1.00 | 21.35 | C |
| ATOM | 4863 | CG | PHE | B | 285 | 25.024 | 43.247 | 49.502 | 1.00 | 20.54 | C |
| ATOM | 4864 | CD1 | PHE | B | 285 | 26.159 | 42.711 | 50.069 | 1.00 | 20.53 | C |
| ATOM | 4866 | CE1 | PHE | B | 285 | 26.185 | 41.370 | 50.501 | 1.00 | 20.89 | C |
| ATOM | 4868 | CZ | PHE | B | 285 | 25.076 | 40.578 | 50.366 | 1.00 | 19.86 | C |
| ATOM | 4870 | CE2 | PHE | B | 285 | 23.929 | 41.115 | 49.811 | 1.00 | 20.65 | C |
| ATOM | 4872 | CD2 | PHE | B | 285 | 23.908 | 42.439 | 49.374 | 1.00 | 20.26 | C |
| ATOM | 4874 | C | PHE | B | 285 | 25.649 | 44.053 | 46.750 | 1.00 | 22.43 | C |
| ATOM | 4875 | O | PHE | B | 285 | 26.387 | 43.118 | 46.441 | 1.00 | 22.74 | O |
| ATOM | 4876 | N | ALA | B | 286 | 24.506 | 44.322 | 46.125 | 1.00 | 22.65 | N |
| ATOM | 4878 | CA | ALA | B | 286 | 24.016 | 43.536 | 45.005 | 1.00 | 22.80 | C |
| ATOM | 4880 | CB | ALA | B | 286 | 22.704 | 44.102 | 44.525 | 1.00 | 22.88 | C |
| ATOM | 4884 | C | ALA | B | 286 | 25.016 | 43.463 | 43.865 | 1.00 | 23.08 | C |
| ATOM | 4885 | O | ALA | B | 286 | 25.214 | 42.411 | 43.264 | 1.00 | 22.81 | O |
| ATOM | 4886 | N | LYS | B | 287 | 25.685 | 44.568 | 43.596 | 1.00 | 23.87 | N |
| ATOM | 4888 | CA | LYS | B | 287 | 26.652 | 44.602 | 42.517 | 1.00 | 25.11 | C |
| ATOM | 4890 | CB | LYS | B | 287 | 27.226 | 46.003 | 42.344 | 1.00 | 25.42 | C |
| ATOM | 4893 | CG | LYS | B | 287 | 26.187 | 46.971 | 41.748 | 1.00 | 28.28 | C |
| ATOM | 4896 | CD | LYS | B | 287 | 26.832 | 48.165 | 41.063 | 1.00 | 31.35 | C |
| ATOM | 4899 | CE | LYS | B | 287 | 25.897 | 49.377 | 40.980 | 1.00 | 32.96 | C |
| ATOM | 4902 | NZ | LYS | B | 287 | 26.647 | 50.645 | 41.304 | 1.00 | 32.73 | N |
| ATOM | 4906 | C | LYS | B | 287 | 27.760 | 43.590 | 42.722 | 1.00 | 25.44 | C |
| ATOM | 4907 | O | LYS | B | 287 | 28.361 | 43.137 | 41.752 | 1.00 | 26.61 | O |
| ATOM | 4908 | N | GLN | B | 288 | 28.022 | 43.224 | 43.970 | 1.00 | 25.27 | N |
| ATOM | 4910 | CA | GLN | B | 288 | 29.029 | 42.219 | 44.288 | 1.00 | 25.25 | C |
| ATOM | 4912 | CB | GLN | B | 288 | 29.717 | 42.573 | 45.589 | 1.00 | 25.77 | C |
| ATOM | 4915 | CG | GLN | B | 288 | 29.935 | 44.035 | 45.776 | 1.00 | 27.24 | C |
| ATOM | 4918 | CD | GLN | B | 288 | 31.158 | 44.290 | 46.532 | 1.00 | 29.33 | C |
| ATOM | 4919 | OE1 | GLN | B | 288 | 32.196 | 44.483 | 45.934 | 1.00 | 35.09 | O |
| ATOM | 4920 | NE2 | GLN | B | 288 | 31.075 | 44.259 | 47.853 | 1.00 | 29.00 | N |
| ATOM | 4923 | C | GLN | B | 288 | 28.503 | 40.805 | 44.434 | 1.00 | 24.86 | C |
| ATOM | 4924 | O | GLN | B | 288 | 29.283 | 39.891 | 44.558 | 1.00 | 24.91 | O |
| ATOM | 4925 | N | VAL | B | 289 | 27.195 | 40.610 | 44.467 | 1.00 | 24.74 | N |
| ATOM | 4927 | CA | VAL | B | 289 | 26.660 | 39.267 | 44.486 | 1.00 | 24.58 | C |

| ATOM | 4929 | CB | VAL B 289 | 25.162 | 39.251 | 44.811 | 1.00 | 24.53 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 4931 | CG1 | VAL B 289 | 24.634 | 37.835 | 44.812 | 1.00 | 24.69 | C |
| ATOM | 4935 | CG2 | VAL B 289 | 24.921 | 39.868 | 46.156 | 1.00 | 23.93 | C |
| ATOM | 4939 | C | VAL B 289 | 26.929 | 38.717 | 43.094 | 1.00 | 24.83 | C |
| ATOM | 4940 | O | VAL B 289 | 26.472 | 39.300 | 42.122 | 1.00 | 25.10 | O |
| ATOM | 4941 | N | PRO B 290 | 27.678 | 37.620 | 42.992 | 1.00 | 24.94 | N |
| ATOM | 4942 | CA | PRO B 290 | 28.052 | 37.045 | 41.695 | 1.00 | 24.44 | C |
| ATOM | 4944 | CB | PRO B 290 | 28.777 | 35.746 | 42.062 | 1.00 | 24.45 | C |
| ATOM | 4947 | CG | PRO B 290 | 29.202 | 35.917 | 43.425 | 1.00 | 25.44 | C |
| ATOM | 4950 | CD | PRO B 290 | 28.174 | 36.803 | 44.112 | 1.00 | 25.43 | C |
| ATOM | 4953 | C | PRO B 290 | 26.825 | 36.690 | 40.884 | 1.00 | 24.08 | C |
| ATOM | 4954 | O | PRO B 290 | 25.905 | 36.024 | 41.437 | 1.00 | 23.85 | O |
| ATOM | 4955 | N | GLY B 291 | 26.833 | 37.116 | 39.612 | 1.00 | 23.44 | N |
| ATOM | 4957 | CA | GLY B 291 | 25.735 | 36.879 | 38.694 | 1.00 | 23.44 | C |
| ATOM | 4960 | C | GLY B 291 | 24.833 | 38.077 | 38.450 | 1.00 | 23.12 | C |
| ATOM | 4961 | O | GLY B 291 | 24.359 | 38.280 | 37.328 | 1.00 | 23.38 | O |
| ATOM | 4962 | N | PHE B 292 | 24.613 | 38.865 | 39.502 | 1.00 | 22.38 | N |
| ATOM | 4964 | CA | PHE B 292 | 23.731 | 40.039 | 39.480 | 1.00 | 21.36 | C |
| ATOM | 4966 | CB | PHE B 292 | 23.776 | 40.776 | 40.851 | 1.00 | 20.83 | C |
| ATOM | 4969 | CG | PHE B 292 | 22.739 | 41.855 | 40.973 | 1.00 | 18.16 | C |
| ATOM | 4970 | CD1 | PHE B 292 | 21.476 | 41.554 | 41.391 | 1.00 | 17.24 | C |
| ATOM | 4972 | CE1 | PHE B 292 | 20.506 | 42.530 | 41.450 | 1.00 | 17.80 | C |
| ATOM | 4974 | CZ | PHE B 292 | 20.809 | 43.828 | 41.072 | 1.00 | 17.38 | C |
| ATOM | 4976 | CE2 | PHE B 292 | 22.078 | 44.131 | 40.657 | 1.00 | 16.22 | C |
| ATOM | 4978 | CD2 | PHE B 292 | 23.020 | 43.154 | 40.591 | 1.00 | 16.61 | C |
| ATOM | 4980 | C | PHE B 292 | 23.986 | 41.031 | 38.304 | 1.00 | 21.31 | C |
| ATOM | 4981 | O | PHE B 292 | 23.072 | 41.350 | 37.526 | 1.00 | 20.13 | O |
| ATOM | 4982 | N | LEU B 293 | 25.219 | 41.508 | 38.186 | 1.00 | 21.18 | N |
| ATOM | 4984 | CA | LEU B 293 | 25.568 | 42.430 | 37.111 | 1.00 | 21.76 | C |
| ATOM | 4986 | CB | LEU B 293 | 27.022 | 42.927 | 37.264 | 1.00 | 21.82 | C |
| ATOM | 4989 | CG | LEU B 293 | 27.303 | 43.908 | 38.421 | 1.00 | 22.75 | C |
| ATOM | 4991 | CD1 | LEU B 293 | 28.745 | 44.210 | 38.488 | 1.00 | 22.25 | C |
| ATOM | 4995 | CD2 | LEU B 293 | 26.506 | 45.225 | 38.324 | 1.00 | 24.06 | C |
| ATOM | 4999 | C | LEU B 293 | 25.341 | 41.853 | 35.687 | 1.00 | 21.89 | C |
| ATOM | 5000 | O | LEU B 293 | 25.247 | 42.629 | 34.722 | 1.00 | 22.16 | O |
| ATOM | 5001 | N | GLN B 294 | 25.257 | 40.519 | 35.553 | 1.00 | 21.83 | N |
| ATOM | 5003 | CA | GLN B 294 | 25.055 | 39.871 | 34.241 | 1.00 | 21.53 | C |
| ATOM | 5005 | CB | GLN B 294 | 25.824 | 38.545 | 34.149 | 1.00 | 22.04 | C |
| ATOM | 5008 | CG | GLN B 294 | 27.313 | 38.716 | 33.899 | 1.00 | 22.88 | C |
| ATOM | 5011 | CD | GLN B 294 | 28.025 | 39.240 | 35.129 | 1.00 | 24.99 | C |
| ATOM | 5012 | OE1 | GLN B 294 | 27.859 | 38.682 | 36.221 | 1.00 | 27.10 | O |
| ATOM | 5013 | NE2 | GLN B 294 | 28.787 | 40.333 | 34.974 | 1.00 | 25.18 | N |
| ATOM | 5016 | C | GLN B 294 | 23.570 | 39.685 | 33.869 | 1.00 | 20.64 | C |
| ATOM | 5017 | O | GLN B 294 | 23.257 | 39.291 | 32.760 | 1.00 | 20.25 | O |
| ATOM | 5018 | N | LEU B 295 | 22.671 | 39.985 | 34.798 | 1.00 | 19.78 | N |
| ATOM | 5020 | CA | LEU B 295 | 21.258 | 40.109 | 34.485 | 1.00 | 19.15 | C |
| ATOM | 5022 | CB | LEU B 295 | 20.419 | 40.160 | 35.768 | 1.00 | 18.87 | C |
| ATOM | 5025 | CG | LEU B 295 | 20.556 | 38.976 | 36.727 | 1.00 | 18.40 | C |

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ATOM   5027 CD1 LEU B 295     19.715 39.168 38.003 1.00 17.43        C
ATOM   5031 CD2 LEU B 295     20.197 37.685 36.013 1.00 18.60        C
ATOM   5035 C   LEU B 295     21.079 41.397 33.705 1.00 19.02        C
ATOM   5036 O   LEU B 295     21.824 42.353 33.912 1.00 19.01        O
ATOM   5037 N   GLY B 296     20.107 41.431 32.802 1.00 18.97        N
ATOM   5039 CA  GLY B 296     19.738 42.676 32.149 1.00 18.83        C
ATOM   5042 C   GLY B 296     19.520 43.804 33.148 1.00 18.89        C
ATOM   5043 O   GLY B 296     18.954 43.608 34.222 1.00 18.57        O
ATOM   5044 N   ARG B 297     19.967 44.997 32.797 1.00 19.04        N
ATOM   5046 CA  ARG B 297     19.892 46.109 33.732 1.00 19.82        C
ATOM   5048 CB  ARG B 297     20.503 47.381 33.145 1.00 20.40        C
ATOM   5051 CG  ARG B 297     20.706 48.509 34.209 1.00 25.47        C
ATOM   5054 CD  ARG B 297     21.667 49.639 33.716 1.00 32.84        C
ATOM   5057 NE  ARG B 297     21.746 50.888 34.511 1.00 37.15        N
ATOM   5059 CZ  ARG B 297     20.774 51.808 34.643 1.00 40.07        C
ATOM   5060 NH1 ARG B 297     19.591 51.645 34.067 1.00 41.83        N
ATOM   5063 NH2 ARG B 297     20.978 52.896 35.381 1.00 40.87        N
ATOM   5066 C   ARG B 297     18.464 46.387 34.242 1.00 18.56        C
ATOM   5067 O   ARG B 297     18.282 46.799 35.394 1.00 18.69        O
ATOM   5068 N   GLU B 298     17.462 46.154 33.410 1.00 17.09        N
ATOM   5070 CA  GLU B 298     16.095 46.419 33.822 1.00 16.30        C
ATOM   5072 CB  GLU B 298     15.140 46.397 32.633 1.00 16.18        C
ATOM   5075 CG  GLU B 298     15.308 47.616 31.754 1.00 16.34        C
ATOM   5078 CD  GLU B 298     14.432 47.610 30.516 1.00 17.34        C
ATOM   5079 OE1 GLU B 298     14.145 46.520 29.956 1.00 17.09        O
ATOM   5080 OE2 GLU B 298     14.051 48.725 30.093 1.00 17.25        O
ATOM   5081 C   GLU B 298     15.669 45.459 34.917 1.00 15.45        C
ATOM   5082 O   GLU B 298     15.004 45.862 35.842 1.00 14.23        O
ATOM   5083 N   ASP B 299     16.099 44.208 34.820 1.00 15.32        N
ATOM   5085 CA  ASP B 299     15.837 43.212 35.848 1.00 15.38        C
ATOM   5087 CB  ASP B 299     16.176 41.816 35.354 1.00 15.65        C
ATOM   5090 CG  ASP B 299     15.101 41.240 34.472 1.00 17.26        C
ATOM   5091 OD1 ASP B 299     14.197 42.027 34.084 1.00 17.09        O
ATOM   5092 OD2 ASP B 299     15.079 40.030 34.111 1.00 18.02        O
ATOM   5093 C   ASP B 299     16.642 43.493 37.088 1.00 15.54        C
ATOM   5094 O   ASP B 299     16.178 43.232 38.182 1.00 15.50        O
ATOM   5095 N   GLN B 300     17.854 44.017 36.945 1.00 15.75        N
ATOM   5097 CA  GLN B 300     18.616 44.408 38.125 1.00 16.03        C
ATOM   5099 CB  GLN B 300     19.960 45.046 37.765 1.00 16.08        C
ATOM   5102 CG  GLN B 300     21.037 44.091 37.367 1.00 16.28        C
ATOM   5105 CD  GLN B 300     22.162 44.827 36.691 1.00 16.76        C
ATOM   5106 OE1 GLN B 300     22.495 45.921 37.113 1.00 18.65        O
ATOM   5107 NE2 GLN B 300     22.729 44.256 35.635 1.00 17.16        N
ATOM   5110 C   GLN B 300     17.801 45.452 38.869 1.00 16.45        C
ATOM   5111 O   GLN B 300     17.594 45.347 40.075 1.00 16.44        O
ATOM   5112 N   ILE B 301     17.379 46.489 38.147 1.00 16.69        N
ATOM   5114 CA  ILE B 301     16.582 47.549 38.751 1.00 17.30        C
ATOM   5116 CB  ILE B 301     16.212 48.604 37.713 1.00 17.31        C
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| ATOM | 5118 | CG1 | ILE | B | 301 | 17.386 | 49.547 | 37.487 | 1.00 | 18.26 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 5121 | CD1 | ILE | B | 301 | 17.252 | 50.424 | 36.211 | 1.00 | 18.99 | C |
| ATOM | 5125 | CG2 | ILE | B | 301 | 15.010 | 49.390 | 38.158 | 1.00 | 17.43 | C |
| ATOM | 5129 | C | ILE | B | 301 | 15.314 | 46.991 | 39.389 | 1.00 | 17.65 | C |
| ATOM | 5130 | O | ILE | B | 301 | 14.943 | 47.392 | 40.474 | 1.00 | 18.77 | O |
| ATOM | 5131 | N | ALA | B | 302 | 14.653 | 46.069 | 38.718 | 1.00 | 17.35 | N |
| ATOM | 5133 | CA | ALA | B | 302 | 13.410 | 45.554 | 39.208 | 1.00 | 17.68 | C |
| ATOM | 5135 | CB | ALA | B | 302 | 12.670 | 44.722 | 38.070 | 1.00 | 17.98 | C |
| ATOM | 5139 | C | ALA | B | 302 | 13.638 | 44.702 | 40.463 | 1.00 | 18.37 | C |
| ATOM | 5140 | O | ALA | B | 302 | 12.785 | 44.672 | 41.359 | 1.00 | 18.56 | O |
| ATOM | 5141 | N | LEU | B | 303 | 14.763 | 43.988 | 40.544 | 1.00 | 18.70 | N |
| ATOM | 5143 | CA | LEU | B | 303 | 15.010 | 43.181 | 41.743 | 1.00 | 19.16 | C |
| ATOM | 5145 | CB | LEU | B | 303 | 16.131 | 42.160 | 41.550 | 1.00 | 18.94 | C |
| ATOM | 5148 | CG | LEU | B | 303 | 15.921 | 41.116 | 40.456 | 1.00 | 19.63 | C |
| ATOM | 5150 | CD1 | LEU | B | 303 | 17.184 | 40.296 | 40.243 | 1.00 | 19.51 | C |
| ATOM | 5154 | CD2 | LEU | B | 303 | 14.704 | 40.222 | 40.770 | 1.00 | 20.37 | C |
| ATOM | 5158 | C | LEU | B | 303 | 15.315 | 44.089 | 42.927 | 1.00 | 19.53 | C |
| ATOM | 5159 | O | LEU | B | 303 | 14.855 | 43.820 | 44.029 | 1.00 | 19.40 | O |
| ATOM | 5160 | N | LEU | B | 304 | 16.067 | 45.164 | 42.696 | 1.00 | 20.29 | N |
| ATOM | 5162 | CA | LEU | B | 304 | 16.414 | 46.076 | 43.770 | 1.00 | 21.41 | C |
| ATOM | 5164 | CB | LEU | B | 304 | 17.634 | 46.895 | 43.428 | 1.00 | 21.75 | C |
| ATOM | 5167 | CG | LEU | B | 304 | 18.982 | 46.131 | 43.413 | 1.00 | 24.86 | C |
| ATOM | 5169 | CD1 | LEU | B | 304 | 20.059 | 46.873 | 42.548 | 1.00 | 25.83 | C |
| ATOM | 5173 | CD2 | LEU | B | 304 | 19.577 | 45.925 | 44.776 | 1.00 | 25.83 | C |
| ATOM | 5177 | C | LEU | B | 304 | 15.228 | 46.974 | 44.198 | 1.00 | 21.93 | C |
| ATOM | 5178 | O | LEU | B | 304 | 15.114 | 47.265 | 45.391 | 1.00 | 21.91 | O |
| ATOM | 5179 | N | LYS | B | 305 | 14.324 | 47.362 | 43.284 | 1.00 | 22.09 | N |
| ATOM | 5181 | CA | LYS | B | 305 | 13.119 | 48.093 | 43.698 | 1.00 | 22.86 | C |
| ATOM | 5183 | CB | LYS | B | 305 | 12.230 | 48.461 | 42.517 | 1.00 | 23.46 | C |
| ATOM | 5186 | CG | LYS | B | 305 | 12.565 | 49.779 | 41.914 | 1.00 | 27.72 | C |
| ATOM | 5189 | CD | LYS | B | 305 | 11.368 | 50.518 | 41.287 | 1.00 | 31.54 | C |
| ATOM | 5192 | CE | LYS | B | 305 | 11.958 | 51.725 | 40.463 | 1.00 | 33.94 | C |
| ATOM | 5195 | NZ | LYS | B | 305 | 11.003 | 52.390 | 39.507 | 1.00 | 35.51 | N |
| ATOM | 5199 | C | LYS | B | 305 | 12.253 | 47.312 | 44.692 | 1.00 | 22.71 | C |
| ATOM | 5200 | O | LYS | B | 305 | 11.634 | 47.877 | 45.582 | 1.00 | 23.22 | O |
| ATOM | 5201 | N | ALA | B | 306 | 12.176 | 46.011 | 44.509 | 1.00 | 22.44 | N |
| ATOM | 5203 | CA | ALA | B | 306 | 11.287 | 45.195 | 45.294 | 1.00 | 21.84 | C |
| ATOM | 5205 | CB | ALA | B | 306 | 10.852 | 44.021 | 44.489 | 1.00 | 21.78 | C |
| ATOM | 5209 | C | ALA | B | 306 | 11.985 | 44.734 | 46.574 | 1.00 | 21.85 | C |
| ATOM | 5210 | O | ALA | B | 306 | 11.387 | 44.778 | 47.648 | 1.00 | 21.97 | O |
| ATOM | 5211 | N | SER | B | 307 | 13.245 | 44.298 | 46.464 | 1.00 | 21.25 | N |
| ATOM | 5213 | CA | SER | B | 307 | 13.925 | 43.658 | 47.592 | 1.00 | 20.58 | C |
| ATOM | 5215 | CB | SER | B | 307 | 15.040 | 42.740 | 47.110 | 1.00 | 19.92 | C |
| ATOM | 5218 | OG | SER | B | 307 | 15.948 | 43.478 | 46.369 | 1.00 | 21.56 | O |
| ATOM | 5220 | C | SER | B | 307 | 14.491 | 44.664 | 48.592 | 1.00 | 20.10 | C |
| ATOM | 5221 | O | SER | B | 307 | 14.849 | 44.277 | 49.686 | 1.00 | 20.12 | O |
| ATOM | 5222 | N | THR | B | 308 | 14.550 | 45.947 | 48.233 | 1.00 | 19.53 | N |
| ATOM | 5224 | CA | THR | B | 308 | 15.229 | 46.952 | 49.060 | 1.00 | 18.86 | C |

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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 5226 | CB | THR | B | 308 | 15.309 | 48.319 | 48.323 | 1.00 18.63 | C |
| ATOM | 5228 | OG1 | THR | B | 308 | 16.445 | 48.318 | 47.466 | 1.00 16.35 | O |
| ATOM | 5230 | CG2 | THR | B | 308 | 15.592 | 49.455 | 49.275 | 1.00 18.82 | C |
| ATOM | 5234 | C | THR | B | 308 | 14.612 | 47.099 | 50.456 | 1.00 18.81 | C |
| ATOM | 5235 | O | THR | B | 308 | 15.308 | 46.991 | 51.470 | 1.00 19.34 | O |
| ATOM | 5236 | N | ILE | B | 309 | 13.318 | 47.340 | 50.512 | 1.00 18.64 | N |
| ATOM | 5238 | CA | ILE | B | 309 | 12.636 | 47.468 | 51.791 | 1.00 18.62 | C |
| ATOM | 5240 | CB | ILE | B | 309 | 11.142 | 47.861 | 51.596 | 1.00 18.32 | C |
| ATOM | 5242 | CG1 | ILE | B | 309 | 10.484 | 48.168 | 52.933 | 1.00 18.77 | C |
| ATOM | 5245 | CD1 | ILE | B | 309 | 11.060 | 49.377 | 53.632 | 1.00 20.64 | C |
| ATOM | 5249 | CG2 | ILE | B | 309 | 10.368 | 46.774 | 50.898 | 1.00 18.60 | C |
| ATOM | 5253 | C | ILE | B | 309 | 12.820 | 46.171 | 52.564 | 1.00 18.73 | C |
| ATOM | 5254 | O | ILE | B | 309 | 13.185 | 46.183 | 53.730 | 1.00 18.87 | O |
| ATOM | 5255 | N | GLU | B | 310 | 12.650 | 45.045 | 51.890 | 1.00 18.92 | N |
| ATOM | 5257 | CA | GLU | B | 310 | 12.748 | 43.765 | 52.577 | 1.00 19.35 | C |
| ATOM | 5259 | CB | GLU | B | 310 | 12.283 | 42.585 | 51.681 | 1.00 19.39 | C |
| ATOM | 5262 | CG | GLU | B | 310 | 10.846 | 42.760 | 51.182 | 1.00 19.11 | C |
| ATOM | 5265 | CD | GLU | B | 310 | 10.416 | 41.734 | 50.166 | 1.00 17.06 | C |
| ATOM | 5266 | OE1 | GLU | B | 310 | 10.970 | 40.632 | 50.150 | 1.00 18.95 | O |
| ATOM | 5267 | OE2 | GLU | B | 310 | 9.517 | 42.049 | 49.385 | 1.00 15.70 | O |
| ATOM | 5268 | C | GLU | B | 310 | 14.153 | 43.556 | 53.164 | 1.00 19.28 | C |
| ATOM | 5269 | O | GLU | B | 310 | 14.275 | 43.145 | 54.297 | 1.00 20.06 | O |
| ATOM | 5270 | N | ILE | B | 311 | 15.207 | 43.841 | 52.426 | 1.00 19.11 | N |
| ATOM | 5272 | CA | ILE | B | 311 | 16.549 | 43.727 | 52.981 | 1.00 19.43 | C |
| ATOM | 5274 | CB | ILE | B | 311 | 17.584 | 44.028 | 51.873 | 1.00 19.38 | C |
| ATOM | 5276 | CG1 | ILE | B | 311 | 17.584 | 42.886 | 50.853 | 1.00 21.23 | C |
| ATOM | 5279 | CD1 | ILE | B | 311 | 18.328 | 43.161 | 49.548 | 1.00 21.91 | C |
| ATOM | 5283 | CG2 | ILE | B | 311 | 18.974 | 44.144 | 52.425 | 1.00 19.92 | C |
| ATOM | 5287 | C | ILE | B | 311 | 16.668 | 44.677 | 54.216 | 1.00 19.73 | C |
| ATOM | 5288 | O | ILE | B | 311 | 17.214 | 44.305 | 55.261 | 1.00 19.63 | O |
| ATOM | 5289 | N | MET | B | 312 | 16.111 | 45.888 | 54.106 | 1.00 19.63 | N |
| ATOM | 5291 | CA | MET | B | 312 | 16.140 | 46.851 | 55.207 | 1.00 19.06 | C |
| ATOM | 5293 | CB | MET | B | 312 | 15.467 | 48.164 | 54.811 | 1.00 18.57 | C |
| ATOM | 5296 | CG | MET | B | 312 | 16.294 | 49.026 | 53.923 | 1.00 19.46 | C |
| ATOM | 5299 | SD | MET | B | 312 | 15.294 | 50.248 | 53.037 | 1.00 23.22 | S |
| ATOM | 5300 | CE | MET | B | 312 | 15.641 | 51.542 | 53.930 | 1.00 27.05 | C |
| ATOM | 5304 | C | MET | B | 312 | 15.461 | 46.264 | 56.451 | 1.00 18.73 | C |
| ATOM | 5305 | O | MET | B | 312 | 15.933 | 46.461 | 57.565 | 1.00 18.21 | O |
| ATOM | 5306 | N | LEU | B | 313 | 14.357 | 45.546 | 56.248 | 1.00 18.54 | N |
| ATOM | 5308 | CA | LEU | B | 313 | 13.606 | 44.939 | 57.357 | 1.00 18.41 | C |
| ATOM | 5310 | CB | LEU | B | 313 | 12.261 | 44.396 | 56.876 | 1.00 17.85 | C |
| ATOM | 5313 | CG | LEU | B | 313 | 11.193 | 45.454 | 56.757 | 1.00 18.52 | C |
| ATOM | 5315 | CD1 | LEU | B | 313 | 10.155 | 44.996 | 55.724 | 1.00 19.77 | C |
| ATOM | 5319 | CD2 | LEU | B | 313 | 10.548 | 45.721 | 58.115 | 1.00 18.67 | C |
| ATOM | 5323 | C | LEU | B | 313 | 14.382 | 43.816 | 58.035 | 1.00 18.44 | C |
| ATOM | 5324 | O | LEU | B | 313 | 14.256 | 43.619 | 59.221 | 1.00 16.86 | O |
| ATOM | 5325 | N | LEU | B | 314 | 15.143 | 43.070 | 57.238 | 1.00 19.37 | N |
| ATOM | 5327 | CA | LEU | B | 314 | 16.043 | 42.042 | 57.722 | 1.00 20.48 | C |

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ATOM  5329 CB  LEU B 314   16.708 41.300 56.539 1.00 20.72      C
ATOM  5332 CG  LEU B 314   16.283 39.877 56.126 1.00 22.28      C
ATOM  5334 CD1 LEU B 314   15.200 39.194 57.028 1.00 22.02      C
ATOM  5338 CD2 LEU B 314   15.826 39.912 54.674 1.00 24.01      C
ATOM  5342 C   LEU B 314   17.132 42.690 58.574 1.00 20.74      C
ATOM  5343 O   LEU B 314   17.544 42.140 59.580 1.00 20.37      O
ATOM  5344 N   GLU B 315   17.581 43.864 58.144 1.00 21.40      N
ATOM  5346 CA  GLU B 315   18.733 44.534 58.729 1.00 21.89      C
ATOM  5348 CB  GLU B 315   19.338 45.547 57.731 1.00 22.24      C
ATOM  5351 CG  GLU B 315   20.322 44.933 56.737 1.00 23.69      C
ATOM  5354 CD  GLU B 315   21.575 44.379 57.398 1.00 27.48      C
ATOM  5355 OE1 GLU B 315   22.095 45.017 58.310 1.00 31.94      O
ATOM  5356 OE2 GLU B 315   22.056 43.300 57.029 1.00 31.90      O
ATOM  5357 C   GLU B 315   18.300 45.192 60.016 1.00 21.60      C
ATOM  5358 O   GLU B 315   19.024 45.189 61.009 1.00 21.91      O
ATOM  5359 N   THR B 316   17.097 45.733 59.984 1.00 21.60      N
ATOM  5361 CA  THR B 316   16.403 46.195 61.177 1.00 21.80      C
ATOM  5363 CB  THR B 316   15.031 46.791 60.788 1.00 22.31      C
ATOM  5365 OG1 THR B 316   15.237 47.956 59.981 1.00 23.26      O
ATOM  5367 CG2 THR B 316   14.255 47.346 62.002 1.00 22.77      C
ATOM  5371 C   THR B 316   16.246 45.094 62.210 1.00 21.08      C
ATOM  5372 O   THR B 316   16.609 45.283 63.341 1.00 21.20      O
ATOM  5373 N   ALA B 317   15.745 43.935 61.824 1.00 21.00      N
ATOM  5375 CA  ALA B 317   15.554 42.836 62.770 1.00 20.86      C
ATOM  5377 CB  ALA B 317   14.841 41.671 62.116 1.00 20.23      C
ATOM  5381 C   ALA B 317   16.893 42.390 63.328 1.00 21.61      C
ATOM  5382 O   ALA B 317   17.018 42.112 64.524 1.00 20.97      O
ATOM  5383 N   ARG B 318   17.903 42.369 62.463 1.00 22.98      N
ATOM  5385 CA  ARG B 318   19.226 41.827 62.796 1.00 24.26      C
ATOM  5387 CB  ARG B 318   20.116 41.839 61.554 1.00 24.61      C
ATOM  5390 CG  ARG B 318   21.565 41.506 61.785 1.00 27.30      C
ATOM  5393 CD  ARG B 318   22.441 41.899 60.624 1.00 31.26      C
ATOM  5396 NE  ARG B 318   23.506 40.917 60.464 1.00 35.50      N
ATOM  5398 CZ  ARG B 318   23.922 40.419 59.298 1.00 39.04      C
ATOM  5399 NH1 ARG B 318   23.378 40.814 58.141 1.00 40.24      N
ATOM  5402 NH2 ARG B 318   24.899 39.516 59.287 1.00 40.03      N
ATOM  5405 C   ARG B 318   19.865 42.652 63.893 1.00 24.70      C
ATOM  5406 O   ARG B 318   20.676 42.149 64.669 1.00 24.10      O
ATOM  5407 N   ARG B 319   19.481 43.923 63.941 1.00 25.45      N
ATOM  5409 CA  ARG B 319   20.015 44.864 64.915 1.00 26.42      C
ATOM  5411 CB  ARG B 319   20.334 46.168 64.194 1.00 27.16      C
ATOM  5414 CG  ARG B 319   21.829 46.223 63.790 1.00 31.66      C
ATOM  5417 CD  ARG B 319   22.152 47.171 62.655 1.00 36.71      C
ATOM  5420 NE  ARG B 319   22.671 46.475 61.483 1.00 40.23      N
ATOM  5422 CZ  ARG B 319   23.531 47.013 60.638 1.00 43.84      C
ATOM  5423 NH1 ARG B 319   23.969 48.264 60.829 1.00 45.76      N
ATOM  5426 NH2 ARG B 319   23.975 46.303 59.604 1.00 44.34      N
ATOM  5429 C   ARG B 319   19.124 45.106 66.139 1.00 25.53      C
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| ATOM | 5430 | O   | ARG B 319 | 19.473 45.867 67.026 1.00 26.02 | O |
|------|------|-----|-----------|----------------------------------|---|
| ATOM | 5431 | N   | TYR B 320 | 17.994 44.421 66.196 1.00 24.69 | N |
| ATOM | 5433 | CA  | TYR B 320 | 17.080 44.492 67.331 1.00 23.67 | C |
| ATOM | 5435 | CB  | TYR B 320 | 15.796 43.722 67.020 1.00 23.61 | C |
| ATOM | 5438 | CG  | TYR B 320 | 14.850 43.664 68.179 1.00 22.41 | C |
| ATOM | 5439 | CD1 | TYR B 320 | 14.200 44.809 68.620 1.00 22.51 | C |
| ATOM | 5441 | CE1 | TYR B 320 | 13.309 44.769 69.698 1.00 23.50 | C |
| ATOM | 5443 | CZ  | TYR B 320 | 13.084 43.567 70.356 1.00 23.49 | C |
| ATOM | 5444 | OH  | TYR B 320 | 12.216 43.506 71.426 1.00 22.21 | O |
| ATOM | 5446 | CE2 | TYR B 320 | 13.735 42.414 69.925 1.00 23.51 | C |
| ATOM | 5448 | CD2 | TYR B 320 | 14.606 42.470 68.832 1.00 22.26 | C |
| ATOM | 5450 | C   | TYR B 320 | 17.709 43.904 68.573 1.00 22.89 | C |
| ATOM | 5451 | O   | TYR B 320 | 18.388 42.900 68.515 1.00 22.88 | O |
| ATOM | 5452 | N   | ASN B 321 | 17.443 44.534 69.698 1.00 22.27 | N |
| ATOM | 5454 | CA  | ASN B 321 | 18.003 44.149 70.973 1.00 21.53 | C |
| ATOM | 5456 | CB  | ASN B 321 | 19.019 45.211 71.389 1.00 21.58 | C |
| ATOM | 5459 | CG  | ASN B 321 | 19.546 45.038 72.808 1.00 21.22 | C |
| ATOM | 5460 | OD1 | ASN B 321 | 18.880 44.505 73.707 1.00 21.24 | O |
| ATOM | 5461 | ND2 | ASN B 321 | 20.753 45.527 73.018 1.00 19.82 | N |
| ATOM | 5464 | C   | ASN B 321 | 16.814 44.048 71.923 1.00 21.27 | C |
| ATOM | 5465 | O   | ASN B 321 | 16.111 45.024 72.171 1.00 19.93 | O |
| ATOM | 5466 | N   | HIS B 322 | 16.588 42.842 72.427 1.00 21.61 | N |
| ATOM | 5468 | CA  | HIS B 322 | 15.390 42.538 73.194 1.00 21.93 | C |
| ATOM | 5470 | CB  | HIS B 322 | 15.038 41.042 73.048 1.00 22.03 | C |
| ATOM | 5473 | CG  | HIS B 322 | 13.659 40.684 73.529 1.00 22.23 | C |
| ATOM | 5474 | ND1 | HIS B 322 | 12.533 41.407 73.188 1.00 21.02 | N |
| ATOM | 5476 | CE1 | HIS B 322 | 11.475 40.862 73.759 1.00 21.69 | C |
| ATOM | 5478 | NE2 | HIS B 322 | 11.872 39.810 74.456 1.00 21.62 | N |
| ATOM | 5480 | CD2 | HIS B 322 | 13.233 39.681 74.336 1.00 21.10 | C |
| ATOM | 5482 | C   | HIS B 322 | 15.504 42.972 74.668 1.00 21.69 | C |
| ATOM | 5483 | O   | HIS B 322 | 14.503 43.043 75.371 1.00 20.75 | O |
| ATOM | 5484 | N   | GLU B 323 | 16.708 43.279 75.127 1.00 22.24 | N |
| ATOM | 5486 | CA  | GLU B 323 | 16.858 43.883 76.452 1.00 23.45 | C |
| ATOM | 5488 | CB  | GLU B 323 | 18.324 44.065 76.840 1.00 24.19 | C |
| ATOM | 5491 | CG  | GLU B 323 | 19.113 42.867 77.348 1.00 26.76 | C |
| ATOM | 5494 | CD  | GLU B 323 | 20.561 43.291 77.602 1.00 30.16 | C |
| ATOM | 5495 | OE1 | GLU B 323 | 21.284 43.480 76.576 1.00 31.88 | O |
| ATOM | 5496 | OE2 | GLU B 323 | 20.948 43.500 78.797 1.00 30.01 | O |
| ATOM | 5497 | C   | GLU B 323 | 16.234 45.280 76.497 1.00 23.08 | C |
| ATOM | 5498 | O   | GLU B 323 | 15.527 45.616 77.451 1.00 23.13 | O |
| ATOM | 5499 | N   | THR B 324 | 16.547 46.085 75.474 1.00 22.66 | N |
| ATOM | 5501 | CA  | THR B 324 | 16.163 47.498 75.392 1.00 21.95 | C |
| ATOM | 5503 | CB  | THR B 324 | 17.344 48.329 74.827 1.00 21.80 | C |
| ATOM | 5505 | OG1 | THR B 324 | 17.583 47.969 73.465 1.00 21.23 | O |
| ATOM | 5507 | CG2 | THR B 324 | 18.657 47.994 75.515 1.00 20.93 | C |
| ATOM | 5511 | C   | THR B 324 | 14.920 47.715 74.514 1.00 21.94 | C |
| ATOM | 5512 | O   | THR B 324 | 14.306 48.787 74.536 1.00 21.72 | O |
| ATOM | 5513 | N   | GLU B 325 | 14.554 46.685 73.756 1.00 22.08 | N |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 5515 | CA | GLU | B | 325 | 13.502 | 46.756 | 72.736 | 1.00 22.38 | C |
| ATOM | 5517 | CB | GLU | B | 325 | 12.116 | 46.851 | 73.401 | 1.00 22.40 | C |
| ATOM | 5520 | CG | GLU | B | 325 | 11.987 | 45.854 | 74.552 | 1.00 24.15 | C |
| ATOM | 5523 | CD | GLU | B | 325 | 10.606 | 45.742 | 75.186 | 1.00 26.69 | C |
| ATOM | 5524 | OE1 | GLU | B | 325 | 10.458 | 46.045 | 76.403 | 1.00 27.58 | O |
| ATOM | 5525 | OE2 | GLU | B | 325 | 9.676 | 45.302 | 74.487 | 1.00 29.29 | O |
| ATOM | 5526 | C | GLU | B | 325 | 13.801 | 47.867 | 71.712 | 1.00 22.25 | C |
| ATOM | 5527 | O | GLU | B | 325 | 12.936 | 48.611 | 71.302 | 1.00 21.35 | O |
| ATOM | 5528 | N | CYS | B | 326 | 15.058 | 47.939 | 71.299 | 1.00 22.98 | N |
| ATOM | 5530 | CA | CYS | B | 326 | 15.511 | 48.981 | 70.405 | 1.00 23.87 | C |
| ATOM | 5532 | CB | CYS | B | 326 | 16.413 | 49.983 | 71.132 | 1.00 23.67 | C |
| ATOM | 5535 | SG | CYS | B | 326 | 15.550 | 51.068 | 72.285 | 1.00 21.30 | S |
| ATOM | 5536 | C | CYS | B | 326 | 16.286 | 48.416 | 69.240 | 1.00 25.69 | C |
| ATOM | 5537 | O | CYS | B | 326 | 17.039 | 47.443 | 69.379 | 1.00 26.02 | O |
| ATOM | 5538 | N | ILE | B | 327 | 16.126 | 49.093 | 68.106 | 1.00 27.55 | N |
| ATOM | 5540 | CA | ILE | B | 327 | 16.757 | 48.752 | 66.845 | 1.00 28.95 | C |
| ATOM | 5542 | CB | ILE | B | 327 | 15.708 | 48.907 | 65.725 | 1.00 28.96 | C |
| ATOM | 5544 | CG1 | ILE | B | 327 | 15.026 | 47.557 | 65.493 | 1.00 29.19 | C |
| ATOM | 5547 | CD1 | ILE | B | 327 | 13.599 | 47.545 | 65.870 | 1.00 29.18 | C |
| ATOM | 5551 | CG2 | ILE | B | 327 | 16.303 | 49.455 | 64.451 | 1.00 28.76 | C |
| ATOM | 5555 | C | ILE | B | 327 | 17.955 | 49.657 | 66.619 | 1.00 30.54 | C |
| ATOM | 5556 | O | ILE | B | 327 | 17.883 | 50.865 | 66.817 | 1.00 30.82 | O |
| ATOM | 5557 | N | THR | B | 328 | 19.056 | 49.049 | 66.197 | 1.00 32.63 | N |
| ATOM | 5559 | CA | THR | B | 328 | 20.318 | 49.747 | 65.921 | 1.00 34.04 | C |
| ATOM | 5561 | CB | THR | B | 328 | 21.492 | 48.901 | 66.500 | 1.00 33.69 | C |
| ATOM | 5563 | OG1 | THR | B | 328 | 21.413 | 48.902 | 67.934 | 1.00 33.36 | O |
| ATOM | 5565 | CG2 | THR | B | 328 | 22.852 | 49.507 | 66.178 | 1.00 33.49 | C |
| ATOM | 5569 | C | THR | B | 328 | 20.484 | 50.039 | 64.391 | 1.00 35.61 | C |
| ATOM | 5570 | O | THR | B | 328 | 20.061 | 49.246 | 63.527 | 1.00 36.66 | O |
| ATOM | 5571 | N | PHE | B | 329 | 21.045 | 51.196 | 64.055 | 1.00 36.68 | N |
| ATOM | 5573 | CA | PHE | B | 329 | 21.391 | 51.481 | 62.674 | 1.00 37.46 | C |
| ATOM | 5575 | CB | PHE | B | 329 | 20.269 | 52.256 | 61.999 | 1.00 37.23 | C |
| ATOM | 5578 | CG | PHE | B | 329 | 20.046 | 51.887 | 60.547 | 1.00 35.32 | C |
| ATOM | 5579 | CD1 | PHE | B | 329 | 19.591 | 50.585 | 60.170 | 1.00 33.51 | C |
| ATOM | 5581 | CE1 | PHE | B | 329 | 19.370 | 50.251 | 58.774 | 1.00 32.44 | C |
| ATOM | 5583 | CZ | PHE | B | 329 | 19.600 | 51.240 | 57.779 | 1.00 32.28 | C |
| ATOM | 5585 | CE2 | PHE | B | 329 | 20.061 | 52.534 | 58.160 | 1.00 32.50 | C |
| ATOM | 5587 | CD2 | PHE | B | 329 | 20.277 | 52.845 | 59.539 | 1.00 33.37 | C |
| ATOM | 5589 | C | PHE | B | 329 | 22.685 | 52.267 | 62.636 | 1.00 38.95 | C |
| ATOM | 5590 | O | PHE | B | 329 | 23.031 | 52.983 | 63.605 | 1.00 39.29 | O |
| ATOM | 5591 | N | ALA | B | 330 | 23.401 | 52.110 | 61.519 | 1.00 40.52 | N |
| ATOM | 5593 | CA | ALA | B | 330 | 24.692 | 52.784 | 61.250 | 1.00 41.72 | C |
| ATOM | 5595 | CB | ALA | B | 330 | 24.448 | 54.292 | 60.856 | 1.00 41.87 | C |
| ATOM | 5599 | C | ALA | B | 330 | 25.755 | 52.665 | 62.382 | 1.00 42.50 | C |
| ATOM | 5600 | O | ALA | B | 330 | 26.510 | 53.613 | 62.635 | 1.00 42.94 | O |
| ATOM | 5601 | N | LYS | B | 331 | 25.796 | 51.501 | 63.047 | 1.00 42.97 | N |
| ATOM | 5603 | CA | LYS | B | 331 | 26.769 | 51.187 | 64.109 | 1.00 42.98 | C |
| ATOM | 5605 | CB | LYS | B | 331 | 28.154 | 51.807 | 63.813 | 1.00 43.35 | C |

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ATOM   5608 CG  LYS B 331    29.367 50.949 64.245 1.00 44.35        C
ATOM   5611 CD  LYS B 331    30.132 51.529 65.477 1.00 44.51        C
ATOM   5614 CE  LYS B 331    31.650 51.256 65.436 1.00 43.98        C
ATOM   5617 NZ  LYS B 331    32.088 50.219 66.425 1.00 43.27        N
ATOM   5621 C   LYS B 331    26.321 51.574 65.528 1.00 42.54        C
ATOM   5622 O   LYS B 331    26.393 50.745 66.441 1.00 42.68        O
ATOM   5623 N   ASP B 332    25.870 52.816 65.715 1.00 41.85        N
ATOM   5625 CA  ASP B 332    25.744 53.405 67.066 1.00 41.27        C
ATOM   5627 CB  ASP B 332    26.648 54.643 67.166 1.00 41.37        C
ATOM   5630 CG  ASP B 332    27.916 54.376 67.939 1.00 43.32        C
ATOM   5631 OD1 ASP B 332    27.800 53.754 69.015 1.00 45.82        O
ATOM   5632 OD2 ASP B 332    29.066 54.755 67.569 1.00 45.99        O
ATOM   5633 C   ASP B 332    24.324 53.807 67.519 1.00 40.06        C
ATOM   5634 O   ASP B 332    23.973 53.629 68.694 1.00 40.21        O
ATOM   5635 N   PHE B 333    23.535 54.375 66.597 1.00 38.31        N
ATOM   5637 CA  PHE B 333    22.264 55.048 66.929 1.00 36.53        C
ATOM   5639 CB  PHE B 333    21.821 55.986 65.783 1.00 36.85        C
ATOM   5642 CG  PHE B 333    22.803 57.109 65.449 1.00 37.25        C
ATOM   5643 CD1 PHE B 333    22.727 57.744 64.202 1.00 37.78        C
ATOM   5645 CE1 PHE B 333    23.602 58.776 63.859 1.00 37.52        C
ATOM   5647 CZ  PHE B 333    24.579 59.191 64.762 1.00 37.96        C
ATOM   5649 CE2 PHE B 333    24.676 58.572 66.010 1.00 38.44        C
ATOM   5651 CD2 PHE B 333    23.782 57.535 66.354 1.00 38.00        C
ATOM   5653 C   PHE B 333    21.173 54.003 67.152 1.00 34.39        C
ATOM   5654 O   PHE B 333    21.133 53.011 66.425 1.00 34.49        O
ATOM   5655 N   THR B 334    20.298 54.213 68.142 1.00 31.37        N
ATOM   5657 CA  THR B 334    19.233 53.245 68.423 1.00 28.90        C
ATOM   5659 CB  THR B 334    19.489 52.472 69.735 1.00 28.73        C
ATOM   5661 OG1 THR B 334    19.395 53.347 70.856 1.00 27.84        O
ATOM   5663 CG2 THR B 334    20.913 51.951 69.798 1.00 28.88        C
ATOM   5667 C   THR B 334    17.885 53.907 68.487 1.00 27.01        C
ATOM   5668 O   THR B 334    17.776 55.056 68.881 1.00 26.50        O
ATOM   5669 N   TYR B 335    16.857 53.163 68.094 1.00 25.11        N
ATOM   5671 CA  TYR B 335    15.482 53.674 68.054 1.00 23.96        C
ATOM   5673 CB  TYR B 335    15.043 53.947 66.594 1.00 23.57        C
ATOM   5676 CG  TYR B 335    16.081 54.764 65.863 1.00 22.27        C
ATOM   5677 CD1 TYR B 335    17.128 54.140 65.207 1.00 20.83        C
ATOM   5679 CE1 TYR B 335    18.116 54.874 64.591 1.00 21.68        C
ATOM   5681 CZ  TYR B 335    18.077 56.255 64.643 1.00 21.74        C
ATOM   5682 OH  TYR B 335    19.076 56.954 64.007 1.00 22.73        O
ATOM   5684 CE2 TYR B 335    17.057 56.908 65.313 1.00 20.42        C
ATOM   5686 CD2 TYR B 335    16.070 56.163 65.920 1.00 20.65        C
ATOM   5688 C   TYR B 335    14.527 52.719 68.769 1.00 23.17        C
ATOM   5689 O   TYR B 335    14.706 51.506 68.715 1.00 22.58        O
ATOM   5690 N   SER B 336    13.536 53.282 69.456 1.00 22.23        N
ATOM   5692 CA  SER B 336    12.465 52.499 70.058 1.00 21.91        C
ATOM   5694 CB  SER B 336    12.186 53.014 71.455 1.00 21.67        C
ATOM   5697 OG  SER B 336    11.627 54.304 71.383 1.00 20.32        O
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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 5699 | C | SER B 336 | 11.171 | 52.601 | 69.229 | 1.00 | 22.21 | C |
| ATOM | 5700 | O | SER B 336 | 11.056 | 53.445 | 68.355 | 1.00 | 22.11 | O |
| ATOM | 5701 | N | LYS B 337 | 10.192 | 51.751 | 69.532 | 1.00 | 22.30 | N |
| ATOM | 5703 | CA | LYS B 337 | 8.848 | 51.861 | 68.971 | 1.00 | 22.58 | C |
| ATOM | 5705 | CB | LYS B 337 | 7.838 | 51.000 | 69.766 | 1.00 | 22.86 | C |
| ATOM | 5708 | CG | LYS B 337 | 7.845 | 49.503 | 69.388 | 1.00 | 25.37 | C |
| ATOM | 5711 | CD | LYS B 337 | 6.937 | 48.610 | 70.288 | 1.00 | 28.27 | C |
| ATOM | 5714 | CE | LYS B 337 | 7.472 | 48.443 | 71.774 | 1.00 | 29.61 | C |
| ATOM | 5717 | NZ | LYS B 337 | 8.733 | 47.647 | 71.941 | 1.00 | 28.77 | N |
| ATOM | 5721 | C | LYS B 337 | 8.395 | 53.315 | 68.969 | 1.00 | 22.19 | C |
| ATOM | 5722 | O | LYS B 337 | 7.792 | 53.773 | 68.012 | 1.00 | 22.00 | O |
| ATOM | 5723 | N | ASP B 338 | 8.688 | 54.035 | 70.047 | 1.00 | 22.23 | N |
| ATOM | 5725 | CA | ASP B 338 | 8.183 | 55.401 | 70.219 | 1.00 | 22.28 | C |
| ATOM | 5727 | CB | ASP B 338 | 8.176 | 55.799 | 71.694 | 1.00 | 22.08 | C |
| ATOM | 5730 | CG | ASP B 338 | 7.074 | 55.120 | 72.462 | 1.00 | 22.94 | C |
| ATOM | 5731 | OD1 | ASP B 338 | 6.945 | 55.394 | 73.666 | 1.00 | 26.13 | O |
| ATOM | 5732 | OD2 | ASP B 338 | 6.268 | 54.313 | 71.955 | 1.00 | 23.05 | O |
| ATOM | 5733 | C | ASP B 338 | 8.939 | 56.433 | 69.387 | 1.00 | 22.00 | C |
| ATOM | 5734 | O | ASP B 338 | 8.362 | 57.451 | 69.002 | 1.00 | 21.99 | O |
| ATOM | 5735 | N | ASP B 339 | 10.217 | 56.178 | 69.122 | 1.00 | 21.47 | N |
| ATOM | 5737 | CA | ASP B 339 | 10.983 | 57.016 | 68.209 | 1.00 | 21.22 | C |
| ATOM | 5739 | CB | ASP B 339 | 12.451 | 56.590 | 68.187 | 1.00 | 21.14 | C |
| ATOM | 5742 | CG | ASP B 339 | 13.153 | 56.814 | 69.514 | 1.00 | 19.12 | C |
| ATOM | 5743 | OD1 | ASP B 339 | 12.607 | 57.516 | 70.397 | 1.00 | 18.47 | O |
| ATOM | 5744 | OD2 | ASP B 339 | 14.272 | 56.317 | 69.737 | 1.00 | 15.17 | O |
| ATOM | 5745 | C | ASP B 339 | 10.395 | 56.922 | 66.805 | 1.00 | 21.49 | C |
| ATOM | 5746 | O | ASP B 339 | 10.181 | 57.936 | 66.157 | 1.00 | 21.88 | O |
| ATOM | 5747 | N | PHE B 340 | 10.124 | 55.703 | 66.355 | 1.00 | 21.61 | N |
| ATOM | 5749 | CA | PHE B 340 | 9.421 | 55.456 | 65.104 | 1.00 | 22.23 | C |
| ATOM | 5751 | CB | PHE B 340 | 9.155 | 53.956 | 64.950 | 1.00 | 22.07 | C |
| ATOM | 5754 | CG | PHE B 340 | 10.312 | 53.168 | 64.340 | 1.00 | 22.43 | C |
| ATOM | 5755 | CD1 | PHE B 340 | 11.454 | 52.904 | 65.060 | 1.00 | 21.40 | C |
| ATOM | 5757 | CE1 | PHE B 340 | 12.484 | 52.181 | 64.526 | 1.00 | 21.44 | C |
| ATOM | 5759 | CZ | PHE B 340 | 12.390 | 51.679 | 63.267 | 1.00 | 24.00 | C |
| ATOM | 5761 | CE2 | PHE B 340 | 11.249 | 51.897 | 62.520 | 1.00 | 24.73 | C |
| ATOM | 5763 | CD2 | PHE B 340 | 10.217 | 52.643 | 63.057 | 1.00 | 24.99 | C |
| ATOM | 5765 | C | PHE B 340 | 8.085 | 56.224 | 65.016 | 1.00 | 23.08 | C |
| ATOM | 5766 | O | PHE B 340 | 7.752 | 56.773 | 63.975 | 1.00 | 22.89 | O |
| ATOM | 5767 | N | HIS B 341 | 7.337 | 56.258 | 66.119 | 1.00 | 24.44 | N |
| ATOM | 5769 | CA | HIS B 341 | 6.057 | 56.966 | 66.211 | 1.00 | 25.29 | C |
| ATOM | 5771 | CB | HIS B 341 | 5.207 | 56.459 | 67.399 | 1.00 | 25.49 | C |
| ATOM | 5774 | CG | HIS B 341 | 3.867 | 57.130 | 67.497 | 1.00 | 29.92 | C |
| ATOM | 5775 | ND1 | HIS B 341 | 2.912 | 57.037 | 66.504 | 1.00 | 34.31 | N |
| ATOM | 5777 | CE1 | HIS B 341 | 1.857 | 57.767 | 66.834 | 1.00 | 35.62 | C |
| ATOM | 5779 | NE2 | HIS B 341 | 2.092 | 58.339 | 68.004 | 1.00 | 35.84 | N |
| ATOM | 5781 | CD2 | HIS B 341 | 3.349 | 57.971 | 68.434 | 1.00 | 34.74 | C |
| ATOM | 5783 | C | HIS B 341 | 6.269 | 58.470 | 66.325 | 1.00 | 25.32 | C |
| ATOM | 5784 | O | HIS B 341 | 5.413 | 59.248 | 65.912 | 1.00 | 25.52 | O |

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ATOM  5785 N   ARG B 342   7.403 58.886 66.884 1.00 25.67      N
ATOM  5787 CA  ARG B 342   7.733 60.315 67.005 1.00 25.80      C
ATOM  5789 CB  ARG B 342   8.877 60.541 67.983 1.00 26.04      C
ATOM  5792 CG  ARG B 342   8.462 60.654 69.435 1.00 27.57      C
ATOM  5795 CD  ARG B 342   9.666 60.676 70.390 1.00 29.94      C
ATOM  5798 NE  ARG B 342   9.657 59.520 71.283 1.00 31.90      N
ATOM  5800 CZ  ARG B 342   9.249 59.536 72.543 1.00 33.91      C
ATOM  5801 NH1 ARG B 342   8.818 60.659 73.121 1.00 34.20      N
ATOM  5804 NH2 ARG B 342   9.271 58.405 73.236 1.00 35.42      N
ATOM  5807 C   ARG B 342   8.138 60.889 65.663 1.00 25.34      C
ATOM  5808 O   ARG B 342   8.109 62.099 65.486 1.00 25.43      O
ATOM  5809 N   ALA B 343   8.526 60.000 64.743 1.00 24.91      N
ATOM  5811 CA  ALA B 343   8.843 60.320 63.348 1.00 24.59      C
ATOM  5813 CB  ALA B 343   9.897 59.295 62.806 1.00 24.44      C
ATOM  5817 C   ALA B 343   7.596 60.310 62.444 1.00 24.35      C
ATOM  5818 O   ALA B 343   7.723 60.401 61.238 1.00 24.68      O
ATOM  5819 N   GLY B 344   6.406 60.159 63.031 1.00 24.10      N
ATOM  5821 CA  GLY B 344   5.129 60.248 62.335 1.00 23.57      C
ATOM  5824 C   GLY B 344   4.644 58.972 61.669 1.00 23.22      C
ATOM  5825 O   GLY B 344   3.623 58.977 60.969 1.00 23.29      O
ATOM  5826 N   LEU B 345   5.386 57.883 61.834 1.00 22.86      N
ATOM  5828 CA  LEU B 345   4.956 56.594 61.301 1.00 22.72      C
ATOM  5830 CB  LEU B 345   6.100 55.563 61.268 1.00 22.72      C
ATOM  5833 CG  LEU B 345   7.542 55.885 60.835 1.00 22.71      C
ATOM  5835 CD1 LEU B 345   8.243 54.642 60.289 1.00 23.31      C
ATOM  5839 CD2 LEU B 345   7.591 56.950 59.811 1.00 23.73      C
ATOM  5843 C   LEU B 345   3.789 56.098 62.161 1.00 22.68      C
ATOM  5844 O   LEU B 345   3.644 56.491 63.315 1.00 22.90      O
ATOM  5845 N   GLN B 346   2.941 55.263 61.577 1.00 22.89      N
ATOM  5847 CA  GLN B 346   1.715 54.789 62.221 1.00 22.82      C
ATOM  5849 CB  GLN B 346   0.550 54.784 61.225 1.00 22.68      C
ATOM  5852 CG  GLN B 346   0.687 53.739 60.126 1.00 22.89      C
ATOM  5855 CD  GLN B 346  -0.168 53.998 58.906 1.00 22.91      C
ATOM  5856 OE1 GLN B 346  -1.027 54.876 58.899 1.00 25.22      O
ATOM  5857 NE2 GLN B 346   0.059 53.219 57.874 1.00 22.78      N
ATOM  5860 C   GLN B 346   1.919 53.394 62.798 1.00 22.78      C
ATOM  5861 O   GLN B 346   2.836 52.673 62.400 1.00 22.46      O
ATOM  5862 N   VAL B 347   1.042 53.025 63.724 1.00 22.81      N
ATOM  5864 CA  VAL B 347   1.178 51.779 64.471 1.00 22.84      C
ATOM  5866 CB  VAL B 347   0.220 51.775 65.691 1.00 23.00      C
ATOM  5868 CG1 VAL B 347  -0.117 50.386 66.156 1.00 23.34      C
ATOM  5872 CG2 VAL B 347   0.876 52.539 66.834 1.00 23.60      C
ATOM  5876 C   VAL B 347   1.004 50.553 63.575 1.00 22.61      C
ATOM  5877 O   VAL B 347   1.561 49.473 63.850 1.00 22.18      O
ATOM  5878 N   GLU B 348   0.288 50.742 62.474 1.00 22.39      N
ATOM  5880 CA  GLU B 348  -0.002 49.652 61.540 1.00 22.40      C
ATOM  5882 CB  GLU B 348  -1.058 50.089 60.518 1.00 22.76      C
ATOM  5885 CG  GLU B 348  -2.452 50.344 61.111 1.00 24.13      C
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| ATOM | 5888 | CD  | GLU B 348 | -2.650 | 51.716 | 61.766 | 1.00 27.04 | C |
| ATOM | 5889 | OE1 | GLU B 348 | -1.883 | 52.665 | 61.519 | 1.00 28.52 | O |
| ATOM | 5890 | OE2 | GLU B 348 | -3.600 | 51.859 | 62.559 | 1.00 30.28 | O |
| ATOM | 5891 | C   | GLU B 348 | 1.258 | 49.093 | 60.860 | 1.00 21.34 | C |
| ATOM | 5892 | O   | GLU B 348 | 1.242 | 47.973 | 60.369 | 1.00 20.76 | O |
| ATOM | 5893 | N   | PHE B 349 | 2.345 | 49.868 | 60.901 | 1.00 20.77 | N |
| ATOM | 5895 | CA  | PHE B 349 | 3.660 | 49.505 | 60.322 | 1.00 20.45 | C |
| ATOM | 5897 | CB  | PHE B 349 | 4.142 | 50.643 | 59.376 | 1.00 20.64 | C |
| ATOM | 5900 | CG  | PHE B 349 | 5.471 | 50.394 | 58.677 | 1.00 20.78 | C |
| ATOM | 5901 | CD1 | PHE B 349 | 5.748 | 49.196 | 58.058 | 1.00 21.02 | C |
| ATOM | 5903 | CE1 | PHE B 349 | 6.962 | 48.998 | 57.425 | 1.00 20.54 | C |
| ATOM | 5905 | CZ  | PHE B 349 | 7.903 | 50.006 | 57.374 | 1.00 19.72 | C |
| ATOM | 5907 | CE2 | PHE B 349 | 7.641 | 51.199 | 57.957 | 1.00 19.91 | C |
| ATOM | 5909 | CD2 | PHE B 349 | 6.433 | 51.401 | 58.611 | 1.00 21.36 | C |
| ATOM | 5911 | C   | PHE B 349 | 4.690 | 49.228 | 61.413 | 1.00 19.62 | C |
| ATOM | 5912 | O   | PHE B 349 | 5.443 | 48.274 | 61.329 | 1.00 19.67 | O |
| ATOM | 5913 | N   | ILE B 350 | 4.695 | 50.055 | 62.444 | 1.00 19.19 | N |
| ATOM | 5915 | CA  | ILE B 350 | 5.594 | 49.897 | 63.577 | 1.00 18.87 | C |
| ATOM | 5917 | CB  | ILE B 350 | 5.414 | 51.034 | 64.548 | 1.00 18.54 | C |
| ATOM | 5919 | CG1 | ILE B 350 | 5.726 | 52.360 | 63.858 | 1.00 17.95 | C |
| ATOM | 5922 | CD1 | ILE B 350 | 5.383 | 53.531 | 64.691 | 1.00 17.74 | C |
| ATOM | 5926 | CG2 | ILE B 350 | 6.334 | 50.832 | 65.753 | 1.00 19.48 | C |
| ATOM | 5930 | C   | ILE B 350 | 5.409 | 48.581 | 64.329 | 1.00 19.09 | C |
| ATOM | 5931 | O   | ILE B 350 | 6.384 | 47.876 | 64.572 | 1.00 19.31 | O |
| ATOM | 5932 | N   | ASN B 351 | 4.181 | 48.239 | 64.704 | 1.00 19.09 | N |
| ATOM | 5934 | CA  | ASN B 351 | 3.950 | 46.965 | 65.412 | 1.00 19.26 | C |
| ATOM | 5936 | CB  | ASN B 351 | 2.492 | 46.861 | 65.878 | 1.00 19.30 | C |
| ATOM | 5939 | CG  | ASN B 351 | 2.216 | 47.712 | 67.152 | 1.00 20.22 | C |
| ATOM | 5940 | OD1 | ASN B 351 | 3.090 | 48.471 | 67.620 | 1.00 21.96 | O |
| ATOM | 5941 | ND2 | ASN B 351 | 1.007 | 47.591 | 67.700 | 1.00 18.64 | N |
| ATOM | 5944 | C   | ASN B 351 | 4.444 | 45.666 | 64.696 | 1.00 19.13 | C |
| ATOM | 5945 | O   | ASN B 351 | 5.173 | 44.873 | 65.296 | 1.00 19.31 | O |
| ATOM | 5946 | N   | PRO B 352 | 4.075 | 45.437 | 63.440 | 1.00 18.65 | N |
| ATOM | 5947 | CA  | PRO B 352 | 4.681 | 44.364 | 62.662 | 1.00 18.12 | C |
| ATOM | 5949 | CB  | PRO B 352 | 4.065 | 44.552 | 61.266 | 1.00 18.43 | C |
| ATOM | 5952 | CG  | PRO B 352 | 2.818 | 45.308 | 61.446 | 1.00 18.44 | C |
| ATOM | 5955 | CD  | PRO B 352 | 2.988 | 46.109 | 62.701 | 1.00 19.18 | C |
| ATOM | 5958 | C   | PRO B 352 | 6.207 | 44.405 | 62.573 | 1.00 18.36 | C |
| ATOM | 5959 | O   | PRO B 352 | 6.810 | 43.341 | 62.449 | 1.00 17.33 | O |
| ATOM | 5960 | N   | ILE B 353 | 6.825 | 45.592 | 62.589 | 1.00 18.97 | N |
| ATOM | 5962 | CA  | ILE B 353 | 8.288 | 45.681 | 62.464 | 1.00 19.14 | C |
| ATOM | 5964 | CB  | ILE B 353 | 8.774 | 47.129 | 62.282 | 1.00 19.20 | C |
| ATOM | 5966 | CG1 | ILE B 353 | 8.540 | 47.569 | 60.853 | 1.00 19.84 | C |
| ATOM | 5969 | CD1 | ILE B 353 | 8.603 | 49.046 | 60.689 | 1.00 20.86 | C |
| ATOM | 5973 | CG2 | ILE B 353 | 10.270 | 47.257 | 62.522 | 1.00 19.89 | C |
| ATOM | 5977 | C   | ILE B 353 | 8.914 | 45.071 | 63.688 | 1.00 19.17 | C |
| ATOM | 5978 | O   | ILE B 353 | 9.826 | 44.235 | 63.586 | 1.00 19.15 | O |
| ATOM | 5979 | N   | PHE B 354 | 8.403 | 45.469 | 64.848 | 1.00 19.09 | N |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 5981 | CA | PHE | B | 354 | 8.901 | 44.932 | 66.096 | 1.00 19.08 | C |
| ATOM | 5983 | CB | PHE | B | 354 | 8.569 | 45.857 | 67.270 | 1.00 18.93 | C |
| ATOM | 5986 | CG | PHE | B | 354 | 9.445 | 47.079 | 67.300 | 1.00 19.28 | C |
| ATOM | 5987 | CD1 | PHE | B | 354 | 9.290 | 48.079 | 66.355 | 1.00 20.06 | C |
| ATOM | 5989 | CE1 | PHE | B | 354 | 10.109 | 49.170 | 66.355 | 1.00 20.21 | C |
| ATOM | 5991 | CZ | PHE | B | 354 | 11.132 | 49.277 | 67.298 | 1.00 19.30 | C |
| ATOM | 5993 | CE2 | PHE | B | 354 | 11.310 | 48.294 | 68.222 | 1.00 18.03 | C |
| ATOM | 5995 | CD2 | PHE | B | 354 | 10.477 | 47.194 | 68.215 | 1.00 19.43 | C |
| ATOM | 5997 | C | PHE | B | 354 | 8.503 | 43.477 | 66.317 | 1.00 19.16 | C |
| ATOM | 5998 | O | PHE | B | 354 | 9.312 | 42.712 | 66.838 | 1.00 19.01 | O |
| ATOM | 5999 | N | GLU | B | 355 | 7.319 | 43.044 | 65.896 | 1.00 19.55 | N |
| ATOM | 6001 | CA | GLU | B | 355 | 7.033 | 41.602 | 65.991 | 1.00 20.22 | C |
| ATOM | 6003 | CB | GLU | B | 355 | 5.584 | 41.249 | 65.739 | 1.00 20.39 | C |
| ATOM | 6006 | CG | GLU | B | 355 | 5.296 | 39.739 | 65.801 | 1.00 23.59 | C |
| ATOM | 6009 | CD | GLU | B | 355 | 5.522 | 39.066 | 67.171 | 1.00 27.11 | C |
| ATOM | 6010 | OE1 | GLU | B | 355 | 5.991 | 37.908 | 67.182 | 1.00 28.26 | O |
| ATOM | 6011 | OE2 | GLU | B | 355 | 5.219 | 39.653 | 68.243 | 1.00 28.91 | O |
| ATOM | 6012 | C | GLU | B | 355 | 7.942 | 40.799 | 65.060 | 1.00 19.88 | C |
| ATOM | 6013 | O | GLU | B | 355 | 8.464 | 39.773 | 65.459 | 1.00 20.45 | O |
| ATOM | 6014 | N | PHE | B | 356 | 8.166 | 41.274 | 63.848 | 1.00 19.33 | N |
| ATOM | 6016 | CA | PHE | B | 356 | 9.088 | 40.612 | 62.932 | 1.00 18.97 | C |
| ATOM | 6018 | CB | PHE | B | 356 | 9.210 | 41.408 | 61.611 | 1.00 19.21 | C |
| ATOM | 6021 | CG | PHE | B | 356 | 10.122 | 40.802 | 60.606 | 1.00 18.35 | C |
| ATOM | 6022 | CD1 | PHE | B | 356 | 9.882 | 39.551 | 60.088 | 1.00 18.72 | C |
| ATOM | 6024 | CE1 | PHE | B | 356 | 10.727 | 38.969 | 59.145 | 1.00 18.09 | C |
| ATOM | 6026 | CZ | PHE | B | 356 | 11.821 | 39.619 | 58.715 | 1.00 17.73 | C |
| ATOM | 6028 | CE2 | PHE | B | 356 | 12.097 | 40.874 | 59.215 | 1.00 20.41 | C |
| ATOM | 6030 | CD2 | PHE | B | 356 | 11.224 | 41.485 | 60.159 | 1.00 20.15 | C |
| ATOM | 6032 | C | PHE | B | 356 | 10.432 | 40.500 | 63.603 | 1.00 19.01 | C |
| ATOM | 6033 | O | PHE | B | 356 | 11.023 | 39.428 | 63.586 | 1.00 19.67 | O |
| ATOM | 6034 | N | SER | B | 357 | 10.923 | 41.593 | 64.200 | 1.00 18.61 | N |
| ATOM | 6036 | CA | SER | B | 357 | 12.296 | 41.620 | 64.729 | 1.00 17.87 | C |
| ATOM | 6038 | CB | SER | B | 357 | 12.710 | 43.013 | 65.216 | 1.00 17.62 | C |
| ATOM | 6041 | OG | SER | B | 357 | 12.580 | 43.997 | 64.238 | 1.00 15.55 | O |
| ATOM | 6043 | C | SER | B | 357 | 12.396 | 40.664 | 65.895 | 1.00 18.01 | C |
| ATOM | 6044 | O | SER | B | 357 | 13.426 | 40.073 | 66.128 | 1.00 18.36 | O |
| ATOM | 6045 | N | ARG | B | 358 | 11.324 | 40.554 | 66.657 | 1.00 18.41 | N |
| ATOM | 6047 | CA | ARG | B | 358 | 11.293 | 39.684 | 67.808 | 1.00 18.89 | C |
| ATOM | 6049 | CB | ARG | B | 358 | 10.030 | 39.931 | 68.629 | 1.00 19.21 | C |
| ATOM | 6052 | CG | ARG | B | 358 | 10.115 | 41.017 | 69.672 | 1.00 20.39 | C |
| ATOM | 6055 | CD | ARG | B | 358 | 8.930 | 41.002 | 70.639 | 1.00 23.01 | C |
| ATOM | 6058 | NE | ARG | B | 358 | 7.661 | 41.293 | 69.956 | 1.00 24.62 | N |
| ATOM | 6060 | CZ | ARG | B | 358 | 7.142 | 42.516 | 69.770 | 1.00 25.65 | C |
| ATOM | 6061 | NH1 | ARG | B | 358 | 7.758 | 43.611 | 70.218 | 1.00 26.41 | N |
| ATOM | 6064 | NH2 | ARG | B | 358 | 5.992 | 42.659 | 69.119 | 1.00 25.90 | N |
| ATOM | 6067 | C | ARG | B | 358 | 11.299 | 38.249 | 67.294 | 1.00 19.27 | C |
| ATOM | 6068 | O | ARG | B | 358 | 12.017 | 37.381 | 67.822 | 1.00 19.25 | O |
| ATOM | 6069 | N | ALA | B | 359 | 10.488 | 38.008 | 66.257 | 1.00 19.38 | N |

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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 6071 | CA | ALA | B | 359 | 10.382 | 36.691 | 65.644 | 1.00 19.20 | C |
| ATOM | 6073 | CB | ALA | B | 359 | 9.350 | 36.675 | 64.528 | 1.00 19.07 | C |
| ATOM | 6077 | C | ALA | B | 359 | 11.739 | 36.306 | 65.125 | 1.00 19.31 | C |
| ATOM | 6078 | O | ALA | B | 359 | 12.208 | 35.214 | 65.409 | 1.00 19.67 | O |
| ATOM | 6079 | N | MET | B | 360 | 12.387 | 37.216 | 64.405 | 1.00 19.46 | N |
| ATOM | 6081 | CA | MET | B | 360 | 13.712 | 36.946 | 63.853 | 1.00 20.16 | C |
| ATOM | 6083 | CB | MET | B | 360 | 14.200 | 38.114 | 62.979 | 1.00 20.19 | C |
| ATOM | 6086 | CG | MET | B | 360 | 13.500 | 38.234 | 61.638 | 1.00 20.34 | C |
| ATOM | 6089 | SD | MET | B | 360 | 13.839 | 36.869 | 60.559 | 1.00 20.37 | S |
| ATOM | 6090 | CE | MET | B | 360 | 15.479 | 37.155 | 60.204 | 1.00 23.09 | C |
| ATOM | 6094 | C | MET | B | 360 | 14.739 | 36.642 | 64.966 | 1.00 20.38 | C |
| ATOM | 6095 | O | MET | B | 360 | 15.699 | 35.880 | 64.761 | 1.00 20.33 | O |
| ATOM | 6096 | N | ARG | B | 361 | 14.547 | 37.234 | 66.137 | 1.00 20.55 | N |
| ATOM | 6098 | CA | ARG | B | 361 | 15.459 | 36.982 | 67.218 | 1.00 20.88 | C |
| ATOM | 6100 | CB | ARG | B | 361 | 15.309 | 38.010 | 68.309 | 1.00 20.98 | C |
| ATOM | 6103 | CG | ARG | B | 361 | 16.316 | 37.831 | 69.407 | 1.00 21.67 | C |
| ATOM | 6106 | CD | ARG | B | 361 | 16.153 | 38.821 | 70.511 | 1.00 23.20 | C |
| ATOM | 6109 | NE | ARG | B | 361 | 16.708 | 38.365 | 71.792 | 1.00 24.55 | N |
| ATOM | 6111 | CZ | ARG | B | 361 | 16.083 | 37.582 | 72.684 | 1.00 24.23 | C |
| ATOM | 6112 | NH1 | ARG | B | 361 | 14.855 | 37.098 | 72.477 | 1.00 22.76 | N |
| ATOM | 6115 | NH2 | ARG | B | 361 | 16.720 | 37.283 | 73.805 | 1.00 25.68 | N |
| ATOM | 6118 | C | ARG | B | 361 | 15.236 | 35.595 | 67.782 | 1.00 21.45 | C |
| ATOM | 6119 | O | ARG | B | 361 | 16.172 | 34.957 | 68.220 | 1.00 21.22 | O |
| ATOM | 6120 | N | ARG | B | 362 | 14.004 | 35.111 | 67.780 | 1.00 22.13 | N |
| ATOM | 6122 | CA | ARG | B | 362 | 13.752 | 33.788 | 68.325 | 1.00 22.86 | C |
| ATOM | 6124 | CB | ARG | B | 362 | 12.261 | 33.511 | 68.464 | 1.00 23.28 | C |
| ATOM | 6127 | CG | ARG | B | 362 | 11.541 | 34.326 | 69.483 | 1.00 24.48 | C |
| ATOM | 6130 | CD | ARG | B | 362 | 10.037 | 34.187 | 69.364 | 1.00 26.98 | C |
| ATOM | 6133 | NE | ARG | B | 362 | 9.338 | 35.435 | 69.665 | 1.00 28.73 | N |
| ATOM | 6135 | CZ | ARG | B | 362 | 8.333 | 35.946 | 68.954 | 1.00 30.48 | C |
| ATOM | 6136 | NH1 | ARG | B | 362 | 7.875 | 35.341 | 67.860 | 1.00 29.56 | N |
| ATOM | 6139 | NH2 | ARG | B | 362 | 7.780 | 37.091 | 69.350 | 1.00 32.91 | N |
| ATOM | 6142 | C | ARG | B | 362 | 14.368 | 32.709 | 67.446 | 1.00 22.90 | C |
| ATOM | 6143 | O | ARG | B | 362 | 14.557 | 31.585 | 67.890 | 1.00 23.17 | O |
| ATOM | 6144 | N | LEU | B | 363 | 14.656 | 33.032 | 66.195 | 1.00 23.09 | N |
| ATOM | 6146 | CA | LEU | B | 363 | 15.352 | 32.090 | 65.320 | 1.00 23.10 | C |
| ATOM | 6148 | CB | LEU | B | 363 | 15.051 | 32.383 | 63.856 | 1.00 23.37 | C |
| ATOM | 6151 | CG | LEU | B | 363 | 13.746 | 31.828 | 63.325 | 1.00 24.43 | C |
| ATOM | 6153 | CD1 | LEU | B | 363 | 13.567 | 32.406 | 61.943 | 1.00 25.89 | C |
| ATOM | 6157 | CD2 | LEU | B | 363 | 13.789 | 30.290 | 63.294 | 1.00 25.28 | C |
| ATOM | 6161 | C | LEU | B | 363 | 16.855 | 32.080 | 65.512 | 1.00 22.55 | C |
| ATOM | 6162 | O | LEU | B | 363 | 17.484 | 31.128 | 65.129 | 1.00 22.71 | O |
| ATOM | 6163 | N | GLY | B | 364 | 17.424 | 33.156 | 66.043 | 1.00 22.17 | N |
| ATOM | 6165 | CA | GLY | B | 364 | 18.838 | 33.217 | 66.362 | 1.00 21.90 | C |
| ATOM | 6168 | C | GLY | B | 364 | 19.769 | 32.980 | 65.197 | 1.00 21.74 | C |
| ATOM | 6169 | O | GLY | B | 364 | 20.661 | 32.123 | 65.278 | 1.00 20.98 | O |
| ATOM | 6170 | N | LEU | B | 365 | 19.561 | 33.742 | 64.123 | 1.00 21.69 | N |
| ATOM | 6172 | CA | LEU | B | 365 | 20.424 | 33.680 | 62.937 | 1.00 22.03 | C |

| ATOM | 6174 | CB | LEU | B | 365 | 19.770 | 34.385 | 61.742 | 1.00 | 22.39 | C |
| ATOM | 6177 | CG | LEU | B | 365 | 18.297 | 34.184 | 61.338 | 1.00 | 23.57 | C |
| ATOM | 6179 | CD1 | LEU | B | 365 | 18.132 | 34.588 | 59.929 | 1.00 | 24.90 | C |
| ATOM | 6183 | CD2 | LEU | B | 365 | 17.853 | 32.769 | 61.452 | 1.00 | 26.03 | C |
| ATOM | 6187 | C | LEU | B | 365 | 21.827 | 34.294 | 63.161 | 1.00 | 21.97 | C |
| ATOM | 6188 | O | LEU | B | 365 | 21.973 | 35.301 | 63.864 | 1.00 | 21.63 | O |
| ATOM | 6189 | N | ASP | B | 366 | 22.852 | 33.669 | 62.571 | 1.00 | 21.97 | N |
| ATOM | 6191 | CA | ASP | B | 366 | 24.214 | 34.227 | 62.545 | 1.00 | 21.76 | C |
| ATOM | 6193 | CB | ASP | B | 366 | 25.300 | 33.132 | 62.729 | 1.00 | 21.83 | C |
| ATOM | 6196 | CG | ASP | B | 366 | 25.210 | 31.983 | 61.714 | 1.00 | 22.12 | C |
| ATOM | 6197 | OD1 | ASP | B | 366 | 24.858 | 32.219 | 60.531 | 1.00 | 23.46 | O |
| ATOM | 6198 | OD2 | ASP | B | 366 | 25.492 | 30.794 | 62.008 | 1.00 | 20.18 | O |
| ATOM | 6199 | C | ASP | B | 366 | 24.399 | 35.040 | 61.259 | 1.00 | 21.52 | C |
| ATOM | 6200 | O | ASP | B | 366 | 23.458 | 35.232 | 60.531 | 1.00 | 21.62 | O |
| ATOM | 6201 | N | ASP | B | 367 | 25.600 | 35.530 | 60.991 | 1.00 | 21.93 | N |
| ATOM | 6203 | CA | ASP | B | 367 | 25.869 | 36.363 | 59.809 | 1.00 | 21.96 | C |
| ATOM | 6205 | CB | ASP | B | 367 | 27.304 | 36.897 | 59.841 | 1.00 | 22.50 | C |
| ATOM | 6208 | CG | ASP | B | 367 | 27.530 | 37.937 | 60.923 | 1.00 | 24.91 | C |
| ATOM | 6209 | OD1 | ASP | B | 367 | 26.560 | 38.629 | 61.362 | 1.00 | 26.49 | O |
| ATOM | 6210 | OD2 | ASP | B | 367 | 28.683 | 38.108 | 61.382 | 1.00 | 28.92 | O |
| ATOM | 6211 | C | ASP | B | 367 | 25.714 | 35.640 | 58.496 | 1.00 | 20.99 | C |
| ATOM | 6212 | O | ASP | B | 367 | 25.215 | 36.193 | 57.525 | 1.00 | 21.18 | O |
| ATOM | 6213 | N | ALA | B | 368 | 26.218 | 34.423 | 58.459 | 1.00 | 19.97 | N |
| ATOM | 6215 | CA | ALA | B | 368 | 26.045 | 33.556 | 57.318 | 1.00 | 19.75 | C |
| ATOM | 6217 | CB | ALA | B | 368 | 26.727 | 32.212 | 57.606 | 1.00 | 19.33 | C |
| ATOM | 6221 | C | ALA | B | 368 | 24.544 | 33.338 | 56.947 | 1.00 | 19.49 | C |
| ATOM | 6222 | O | ALA | B | 368 | 24.174 | 33.331 | 55.779 | 1.00 | 19.63 | O |
| ATOM | 6223 | N | GLU | B | 369 | 23.692 | 33.136 | 57.942 | 1.00 | 19.20 | N |
| ATOM | 6225 | CA | GLU | B | 369 | 22.302 | 32.829 | 57.686 | 1.00 | 18.60 | C |
| ATOM | 6227 | CB | GLU | B | 369 | 21.622 | 32.259 | 58.934 | 1.00 | 18.76 | C |
| ATOM | 6230 | CG | GLU | B | 369 | 22.020 | 30.797 | 59.128 | 1.00 | 19.93 | C |
| ATOM | 6233 | CD | GLU | B | 369 | 21.526 | 30.131 | 60.415 | 1.00 | 22.09 | C |
| ATOM | 6234 | OE1 | GLU | B | 369 | 21.206 | 28.912 | 60.342 | 1.00 | 22.95 | O |
| ATOM | 6235 | OE2 | GLU | B | 369 | 21.502 | 30.774 | 61.499 | 1.00 | 21.86 | O |
| ATOM | 6236 | C | GLU | B | 369 | 21.643 | 34.059 | 57.145 | 1.00 | 17.93 | C |
| ATOM | 6237 | O | GLU | B | 369 | 20.951 | 33.977 | 56.144 | 1.00 | 17.73 | O |
| ATOM | 6238 | N | TYR | B | 370 | 21.922 | 35.202 | 57.750 | 1.00 | 17.57 | N |
| ATOM | 6240 | CA | TYR | B | 370 | 21.345 | 36.470 | 57.298 | 1.00 | 18.20 | C |
| ATOM | 6242 | CB | TYR | B | 370 | 21.750 | 37.623 | 58.220 | 1.00 | 18.25 | C |
| ATOM | 6245 | CG | TYR | B | 370 | 20.713 | 37.978 | 59.225 | 1.00 | 17.86 | C |
| ATOM | 6246 | CD1 | TYR | B | 370 | 20.874 | 37.641 | 60.557 | 1.00 | 20.22 | C |
| ATOM | 6248 | CE1 | TYR | B | 370 | 19.902 | 37.958 | 61.496 | 1.00 | 21.95 | C |
| ATOM | 6250 | CZ | TYR | B | 370 | 18.759 | 38.609 | 61.082 | 1.00 | 21.88 | C |
| ATOM | 6251 | OH | TYR | B | 370 | 17.798 | 38.912 | 61.996 | 1.00 | 24.56 | O |
| ATOM | 6253 | CE2 | TYR | B | 370 | 18.592 | 38.960 | 59.766 | 1.00 | 20.01 | C |
| ATOM | 6255 | CD2 | TYR | B | 370 | 19.568 | 38.636 | 58.849 | 1.00 | 18.17 | C |
| ATOM | 6257 | C | TYR | B | 370 | 21.783 | 36.826 | 55.894 | 1.00 | 18.62 | C |
| ATOM | 6258 | O | TYR | B | 370 | 21.012 | 37.330 | 55.095 | 1.00 | 18.31 | O |

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| ATOM | 6259 | N | ALA B 371 | 23.059 | 36.586 | 55.625 | 1.00 | 19.41 | N |
| ATOM | 6261 | CA | ALA B 371 | 23.651 | 36.869 | 54.332 | 1.00 | 19.77 | C |
| ATOM | 6263 | CB | ALA B 371 | 25.101 | 36.520 | 54.355 | 1.00 | 20.11 | C |
| ATOM | 6267 | C | ALA B 371 | 22.942 | 36.048 | 53.280 | 1.00 | 20.15 | C |
| ATOM | 6268 | O | ALA B 371 | 22.403 | 36.600 | 52.334 | 1.00 | 20.44 | O |
| ATOM | 6269 | N | LEU B 372 | 22.926 | 34.733 | 53.464 | 1.00 | 20.08 | N |
| ATOM | 6271 | CA | LEU B 372 | 22.245 | 33.855 | 52.542 | 1.00 | 20.52 | C |
| ATOM | 6273 | CB | LEU B 372 | 22.332 | 32.416 | 53.037 | 1.00 | 20.24 | C |
| ATOM | 6276 | CG | LEU B 372 | 23.674 | 31.705 | 52.814 | 1.00 | 20.48 | C |
| ATOM | 6278 | CD1 | LEU B 372 | 23.645 | 30.402 | 53.579 | 1.00 | 22.12 | C |
| ATOM | 6282 | CD2 | LEU B 372 | 23.996 | 31.406 | 51.368 | 1.00 | 19.23 | C |
| ATOM | 6286 | C | LEU B 372 | 20.771 | 34.266 | 52.285 | 1.00 | 21.35 | C |
| ATOM | 6287 | O | LEU B 372 | 20.262 | 34.155 | 51.152 | 1.00 | 21.29 | O |
| ATOM | 6288 | N | LEU B 373 | 20.091 | 34.757 | 53.322 | 1.00 | 21.78 | N |
| ATOM | 6290 | CA | LEU B 373 | 18.669 | 35.090 | 53.218 | 1.00 | 21.88 | C |
| ATOM | 6292 | CB | LEU B 373 | 18.099 | 35.318 | 54.605 | 1.00 | 22.34 | C |
| ATOM | 6295 | CG | LEU B 373 | 16.631 | 35.052 | 54.870 | 1.00 | 24.27 | C |
| ATOM | 6297 | CD1 | LEU B 373 | 16.240 | 33.634 | 54.489 | 1.00 | 25.08 | C |
| ATOM | 6301 | CD2 | LEU B 373 | 16.434 | 35.258 | 56.348 | 1.00 | 26.33 | C |
| ATOM | 6305 | C | LEU B 373 | 18.492 | 36.348 | 52.400 | 1.00 | 21.53 | C |
| ATOM | 6306 | O | LEU B 373 | 17.525 | 36.513 | 51.691 | 1.00 | 21.68 | O |
| ATOM | 6307 | N | ILE B 374 | 19.451 | 37.244 | 52.506 | 1.00 | 21.20 | N |
| ATOM | 6309 | CA | ILE B 374 | 19.438 | 38.454 | 51.717 | 1.00 | 21.25 | C |
| ATOM | 6311 | CB | ILE B 374 | 20.474 | 39.439 | 52.290 | 1.00 | 21.83 | C |
| ATOM | 6313 | CG1 | ILE B 374 | 19.942 | 40.033 | 53.609 | 1.00 | 22.17 | C |
| ATOM | 6316 | CD1 | ILE B 374 | 21.057 | 40.530 | 54.545 | 1.00 | 23.01 | C |
| ATOM | 6320 | CG2 | ILE B 374 | 20.798 | 40.532 | 51.287 | 1.00 | 22.04 | C |
| ATOM | 6324 | C | ILE B 374 | 19.701 | 38.147 | 50.244 | 1.00 | 20.32 | C |
| ATOM | 6325 | O | ILE B 374 | 19.026 | 38.676 | 49.384 | 1.00 | 20.43 | O |
| ATOM | 6326 | N | ALA B 375 | 20.668 | 37.287 | 49.962 | 1.00 | 19.75 | N |
| ATOM | 6328 | CA | ALA B 375 | 20.935 | 36.828 | 48.599 | 1.00 | 19.72 | C |
| ATOM | 6330 | CB | ALA B 375 | 22.103 | 35.907 | 48.605 | 1.00 | 19.65 | C |
| ATOM | 6334 | C | ALA B 375 | 19.717 | 36.114 | 47.975 | 1.00 | 20.06 | C |
| ATOM | 6335 | O | ALA B 375 | 19.323 | 36.387 | 46.843 | 1.00 | 19.99 | O |
| ATOM | 6336 | N | ILE B 376 | 19.106 | 35.208 | 48.731 | 1.00 | 20.10 | N |
| ATOM | 6338 | CA | ILE B 376 | 17.867 | 34.578 | 48.295 | 1.00 | 19.73 | C |
| ATOM | 6340 | CB | ILE B 376 | 17.372 | 33.606 | 49.367 | 1.00 | 19.55 | C |
| ATOM | 6342 | CG1 | ILE B 376 | 18.335 | 32.421 | 49.481 | 1.00 | 20.36 | C |
| ATOM | 6345 | CD1 | ILE B 376 | 18.102 | 31.493 | 50.697 | 1.00 | 20.84 | C |
| ATOM | 6349 | CG2 | ILE B 376 | 15.972 | 33.126 | 49.009 | 1.00 | 18.87 | C |
| ATOM | 6353 | C | ILE B 376 | 16.794 | 35.625 | 48.008 | 1.00 | 19.34 | C |
| ATOM | 6354 | O | ILE B 376 | 16.097 | 35.560 | 47.002 | 1.00 | 19.00 | O |
| ATOM | 6355 | N | ASN B 377 | 16.669 | 36.585 | 48.911 | 1.00 | 19.36 | N |
| ATOM | 6357 | CA | ASN B 377 | 15.673 | 37.626 | 48.774 | 1.00 | 19.72 | C |
| ATOM | 6359 | CB | ASN B 377 | 15.687 | 38.548 | 49.985 | 1.00 | 19.90 | C |
| ATOM | 6362 | CG | ASN B 377 | 14.531 | 39.515 | 49.975 | 1.00 | 20.18 | C |
| ATOM | 6363 | OD1 | ASN B 377 | 14.601 | 40.538 | 49.327 | 1.00 | 21.54 | O |
| ATOM | 6364 | ND2 | ASN B 377 | 13.454 | 39.185 | 50.682 | 1.00 | 19.64 | N |

| ATOM | 6367 | C | ASN B 377 | 15.876 38.451 47.501 1.00 19.83 | C |
| ATOM | 6368 | O | ASN B 377 | 14.899 38.825 46.841 1.00 19.63 | O |
| ATOM | 6369 | N | ILE B 378 | 17.133 38.721 47.138 1.00 19.53 | N |
| ATOM | 6371 | CA | ILE B 378 | 17.402 39.535 45.947 1.00 19.39 | C |
| ATOM | 6373 | CB | ILE B 378 | 18.892 39.895 45.864 1.00 19.13 | C |
| ATOM | 6375 | CG1 | ILE B 378 | 19.253 40.988 46.873 1.00 18.64 | C |
| ATOM | 6378 | CD1 | ILE B 378 | 20.756 41.087 47.216 1.00 18.30 | C |
| ATOM | 6382 | CG2 | ILE B 378 | 19.211 40.382 44.502 1.00 20.08 | C |
| ATOM | 6386 | C | ILE B 378 | 16.946 38.761 44.702 1.00 19.44 | C |
| ATOM | 6387 | O | ILE B 378 | 16.234 39.281 43.843 1.00 19.04 | O |
| ATOM | 6388 | N | PHE B 379 | 17.362 37.500 44.636 1.00 20.13 | N |
| ATOM | 6390 | CA | PHE B 379 | 17.057 36.605 43.510 1.00 20.55 | C |
| ATOM | 6392 | CB | PHE B 379 | 18.160 35.555 43.372 1.00 19.19 | C |
| ATOM | 6395 | CG | PHE B 379 | 19.480 36.135 43.009 1.00 18.93 | C |
| ATOM | 6396 | CD1 | PHE B 379 | 20.620 35.781 43.693 1.00 19.79 | C |
| ATOM | 6398 | CE1 | PHE B 379 | 21.850 36.338 43.339 1.00 19.77 | C |
| ATOM | 6400 | CZ | PHE B 379 | 21.926 37.253 42.267 1.00 18.12 | C |
| ATOM | 6402 | CE2 | PHE B 379 | 20.803 37.598 41.595 1.00 16.98 | C |
| ATOM | 6404 | CD2 | PHE B 379 | 19.593 37.055 41.963 1.00 19.16 | C |
| ATOM | 6406 | C | PHE B 379 | 15.633 35.985 43.578 1.00 21.45 | C |
| ATOM | 6407 | O | PHE B 379 | 15.442 34.813 43.424 1.00 21.76 | O |
| ATOM | 6408 | N | SER B 380 | 14.638 36.820 43.771 1.00 22.84 | N |
| ATOM | 6410 | CA | SER B 380 | 13.261 36.399 43.772 1.00 23.88 | C |
| ATOM | 6412 | CB | SER B 380 | 12.444 37.291 44.720 1.00 23.56 | C |
| ATOM | 6415 | OG | SER B 380 | 12.812 37.045 46.042 1.00 23.12 | O |
| ATOM | 6417 | C | SER B 380 | 12.754 36.575 42.363 1.00 24.73 | C |
| ATOM | 6418 | O | SER B 380 | 12.582 37.697 41.901 1.00 25.21 | O |
| ATOM | 6419 | N | ALA B 381 | 12.464 35.478 41.684 1.00 26.26 | N |
| ATOM | 6421 | CA | ALA B 381 | 12.124 35.551 40.246 1.00 26.69 | C |
| ATOM | 6423 | CB | ALA B 381 | 12.230 34.178 39.572 1.00 26.50 | C |
| ATOM | 6427 | C | ALA B 381 | 10.758 36.168 39.990 1.00 26.86 | C |
| ATOM | 6428 | O | ALA B 381 | 10.514 36.644 38.869 1.00 27.16 | O |
| ATOM | 6429 | N | ASP B 382 | 9.898 36.202 41.019 1.00 26.82 | N |
| ATOM | 6431 | CA | ASP B 382 | 8.498 36.644 40.851 1.00 26.90 | C |
| ATOM | 6433 | CB | ASP B 382 | 7.628 35.804 41.720 1.00 27.49 | C |
| ATOM | 6436 | CG | ASP B 382 | 7.814 36.137 43.155 1.00 30.39 | C |
| ATOM | 6437 | OD1 | ASP B 382 | 8.963 36.427 43.548 1.00 32.42 | O |
| ATOM | 6438 | OD2 | ASP B 382 | 6.874 36.168 43.958 1.00 35.98 | O |
| ATOM | 6439 | C | ASP B 382 | 8.214 38.092 41.223 1.00 26.15 | C |
| ATOM | 6440 | O | ASP B 382 | 7.088 38.453 41.531 1.00 25.45 | O |
| ATOM | 6441 | N | ARG B 383 | 9.244 38.923 41.215 1.00 25.85 | N |
| ATOM | 6443 | CA | ARG B 383 | 9.036 40.342 41.392 1.00 25.29 | C |
| ATOM | 6445 | CB | ARG B 383 | 10.356 41.064 41.574 1.00 25.32 | C |
| ATOM | 6448 | CG | ARG B 383 | 11.181 40.580 42.713 1.00 24.29 | C |
| ATOM | 6451 | CD | ARG B 383 | 10.514 40.697 44.041 1.00 23.33 | C |
| ATOM | 6454 | NE | ARG B 383 | 11.504 40.573 45.118 1.00 22.46 | N |
| ATOM | 6456 | CZ | ARG B 383 | 11.225 40.635 46.406 1.00 20.26 | C |
| ATOM | 6457 | NH1 | ARG B 383 | 9.988 40.849 46.836 1.00 18.05 | N |

| ATOM | 6460 | NH2 | ARG | B | 383 | 12.198 | 40.476 | 47.272 | 1.00 | 22.17 | N |
| ATOM | 6463 | C | ARG | B | 383 | 8.349 | 40.918 | 40.181 | 1.00 | 24.76 | C |
| ATOM | 6464 | O | ARG | B | 383 | 8.384 | 40.356 | 39.115 | 1.00 | 25.12 | O |
| ATOM | 6465 | N | PRO | B | 384 | 7.704 | 42.048 | 40.343 | 1.00 | 24.53 | N |
| ATOM | 6466 | CA | PRO | B | 384 | 7.124 | 42.734 | 39.196 | 1.00 | 24.04 | C |
| ATOM | 6468 | CB | PRO | B | 384 | 6.475 | 43.975 | 39.831 | 1.00 | 24.07 | C |
| ATOM | 6471 | CG | PRO | B | 384 | 6.155 | 43.540 | 41.218 | 1.00 | 24.47 | C |
| ATOM | 6474 | CD | PRO | B | 384 | 7.386 | 42.734 | 41.609 | 1.00 | 24.83 | C |
| ATOM | 6477 | C | PRO | B | 384 | 8.165 | 43.135 | 38.164 | 1.00 | 23.45 | C |
| ATOM | 6478 | O | PRO | B | 384 | 9.263 | 43.545 | 38.519 | 1.00 | 23.34 | O |
| ATOM | 6479 | N | ASN | B | 385 | 7.769 | 43.018 | 36.902 | 1.00 | 23.00 | N |
| ATOM | 6481 | CA | ASN | B | 385 | 8.504 | 43.474 | 35.720 | 1.00 | 22.84 | C |
| ATOM | 6483 | CB | ASN | B | 385 | 8.692 | 45.002 | 35.670 | 1.00 | 23.07 | C |
| ATOM | 6486 | CG | ASN | B | 385 | 7.495 | 45.783 | 36.186 | 1.00 | 23.82 | C |
| ATOM | 6487 | OD1 | ASN | B | 385 | 7.558 | 46.358 | 37.253 | 1.00 | 27.50 | O |
| ATOM | 6488 | ND2 | ASN | B | 385 | 6.425 | 45.831 | 35.424 | 1.00 | 24.98 | N |
| ATOM | 6491 | C | ASN | B | 385 | 9.842 | 42.767 | 35.469 | 1.00 | 22.54 | C |
| ATOM | 6492 | O | ASN | B | 385 | 10.709 | 43.305 | 34.761 | 1.00 | 22.77 | O |
| ATOM | 6493 | N | VAL | B | 386 | 10.018 | 41.560 | 36.003 | 1.00 | 21.82 | N |
| ATOM | 6495 | CA | VAL | B | 386 | 11.217 | 40.796 | 35.662 | 1.00 | 21.30 | C |
| ATOM | 6497 | CB | VAL | B | 386 | 11.578 | 39.773 | 36.744 | 1.00 | 21.47 | C |
| ATOM | 6499 | CG1 | VAL | B | 386 | 12.626 | 38.766 | 36.233 | 1.00 | 20.95 | C |
| ATOM | 6503 | CG2 | VAL | B | 386 | 12.092 | 40.509 | 37.997 | 1.00 | 21.14 | C |
| ATOM | 6507 | C | VAL | B | 386 | 10.979 | 40.156 | 34.287 | 1.00 | 20.86 | C |
| ATOM | 6508 | O | VAL | B | 386 | 9.952 | 39.549 | 34.038 | 1.00 | 21.19 | O |
| ATOM | 6509 | N | GLN | B | 387 | 11.918 | 40.338 | 33.381 | 1.00 | 20.10 | N |
| ATOM | 6511 | CA | GLN | B | 387 | 11.739 | 39.932 | 32.010 | 1.00 | 19.47 | C |
| ATOM | 6513 | CB | GLN | B | 387 | 12.281 | 41.018 | 31.111 | 1.00 | 19.47 | C |
| ATOM | 6516 | CG | GLN | B | 387 | 11.517 | 42.299 | 31.223 | 1.00 | 19.97 | C |
| ATOM | 6519 | CD | GLN | B | 387 | 12.162 | 43.357 | 30.380 | 1.00 | 21.09 | C |
| ATOM | 6520 | OE1 | GLN | B | 387 | 12.343 | 43.165 | 29.181 | 1.00 | 22.44 | O |
| ATOM | 6521 | NE2 | GLN | B | 387 | 12.537 | 44.467 | 30.995 | 1.00 | 22.01 | N |
| ATOM | 6524 | C | GLN | B | 387 | 12.436 | 38.613 | 31.725 | 1.00 | 18.93 | C |
| ATOM | 6525 | O | GLN | B | 387 | 12.212 | 38.015 | 30.699 | 1.00 | 19.67 | O |
| ATOM | 6526 | N | GLU | B | 388 | 13.279 | 38.165 | 32.633 | 1.00 | 18.08 | N |
| ATOM | 6528 | CA | GLU | B | 388 | 13.932 | 36.895 | 32.503 | 1.00 | 17.71 | C |
| ATOM | 6530 | CB | GLU | B | 388 | 15.354 | 37.131 | 32.026 | 1.00 | 17.81 | C |
| ATOM | 6533 | CG | GLU | B | 388 | 15.468 | 37.453 | 30.550 | 1.00 | 17.82 | C |
| ATOM | 6536 | CD | GLU | B | 388 | 16.918 | 37.440 | 30.101 | 1.00 | 18.15 | C |
| ATOM | 6537 | OE1 | GLU | B | 388 | 17.571 | 38.493 | 30.302 | 1.00 | 17.11 | O |
| ATOM | 6538 | OE2 | GLU | B | 388 | 17.405 | 36.380 | 29.585 | 1.00 | 15.67 | O |
| ATOM | 6539 | C | GLU | B | 388 | 13.931 | 36.230 | 33.876 | 1.00 | 17.82 | C |
| ATOM | 6540 | O | GLU | B | 388 | 14.963 | 36.087 | 34.494 | 1.00 | 17.76 | O |
| ATOM | 6541 | N | PRO | B | 389 | 12.768 | 35.841 | 34.374 | 1.00 | 18.13 | N |
| ATOM | 6542 | CA | PRO | B | 389 | 12.679 | 35.301 | 35.720 | 1.00 | 18.15 | C |
| ATOM | 6544 | CB | PRO | B | 389 | 11.201 | 35.054 | 35.919 | 1.00 | 17.76 | C |
| ATOM | 6547 | CG | PRO | B | 389 | 10.546 | 35.280 | 34.664 | 1.00 | 17.88 | C |
| ATOM | 6550 | CD | PRO | B | 389 | 11.463 | 35.882 | 33.704 | 1.00 | 18.53 | C |

| ATOM | 6553 | C | PRO | B | 389 | 13.468 | 34.024 | 35.840 | 1.00 | 19.05 | C |
| ATOM | 6554 | O | PRO | B | 389 | 14.147 | 33.863 | 36.848 | 1.00 | 19.55 | O |
| ATOM | 6555 | N | GLY | B | 390 | 13.399 | 33.155 | 34.835 | 1.00 | 19.58 | N |
| ATOM | 6557 | CA | GLY | B | 390 | 14.282 | 32.013 | 34.722 | 1.00 | 19.86 | C |
| ATOM | 6560 | C | GLY | B | 390 | 15.729 | 32.242 | 35.110 | 1.00 | 20.83 | C |
| ATOM | 6561 | O | GLY | B | 390 | 16.320 | 31.440 | 35.846 | 1.00 | 22.05 | O |
| ATOM | 6562 | N | ARG | B | 391 | 16.339 | 33.316 | 34.636 | 1.00 | 21.12 | N |
| ATOM | 6564 | CA | ARG | B | 391 | 17.744 | 33.569 | 34.983 | 1.00 | 21.55 | C |
| ATOM | 6566 | CB | ARG | B | 391 | 18.313 | 34.704 | 34.121 | 1.00 | 21.64 | C |
| ATOM | 6569 | CG | ARG | B | 391 | 18.149 | 34.521 | 32.611 | 1.00 | 22.19 | C |
| ATOM | 6572 | CD | ARG | B | 391 | 19.056 | 33.468 | 32.031 | 1.00 | 22.52 | C |
| ATOM | 6575 | NE | ARG | B | 391 | 20.455 | 33.858 | 32.107 | 1.00 | 23.38 | N |
| ATOM | 6577 | CZ | ARG | B | 391 | 21.458 | 33.104 | 31.677 | 1.00 | 23.56 | C |
| ATOM | 6578 | NH1 | ARG | B | 391 | 21.215 | 31.909 | 31.160 | 1.00 | 24.93 | N |
| ATOM | 6581 | NH2 | ARG | B | 391 | 22.705 | 33.537 | 31.757 | 1.00 | 22.82 | N |
| ATOM | 6584 | C | ARG | B | 391 | 17.912 | 33.933 | 36.469 | 1.00 | 22.06 | C |
| ATOM | 6585 | O | ARG | B | 391 | 18.965 | 33.784 | 37.055 | 1.00 | 22.01 | O |
| ATOM | 6586 | N | VAL | B | 392 | 16.865 | 34.470 | 37.060 | 1.00 | 23.06 | N |
| ATOM | 6588 | CA | VAL | B | 392 | 16.912 | 34.882 | 38.449 | 1.00 | 23.96 | C |
| ATOM | 6590 | CB | VAL | B | 392 | 15.765 | 35.907 | 38.779 | 1.00 | 23.94 | C |
| ATOM | 6592 | CG1 | VAL | B | 392 | 15.793 | 36.298 | 40.243 | 1.00 | 24.94 | C |
| ATOM | 6596 | CG2 | VAL | B | 392 | 15.894 | 37.149 | 37.933 | 1.00 | 22.66 | C |
| ATOM | 6600 | C | VAL | B | 392 | 16.838 | 33.614 | 39.309 | 1.00 | 24.69 | C |
| ATOM | 6601 | O | VAL | B | 392 | 17.721 | 33.368 | 40.123 | 1.00 | 23.97 | O |
| ATOM | 6602 | N | GLU | B | 393 | 15.803 | 32.798 | 39.092 | 1.00 | 25.88 | N |
| ATOM | 6604 | CA | GLU | B | 393 | 15.709 | 31.469 | 39.730 | 1.00 | 27.13 | C |
| ATOM | 6606 | CB | GLU | B | 393 | 14.635 | 30.644 | 39.068 | 1.00 | 27.48 | C |
| ATOM | 6609 | CG | GLU | B | 393 | 14.022 | 29.585 | 39.964 | 1.00 | 31.61 | C |
| ATOM | 6612 | CD | GLU | B | 393 | 12.669 | 29.130 | 39.408 | 1.00 | 38.64 | C |
| ATOM | 6613 | OE1 | GLU | B | 393 | 11.641 | 29.489 | 40.026 | 1.00 | 42.36 | O |
| ATOM | 6614 | OE2 | GLU | B | 393 | 12.622 | 28.452 | 38.331 | 1.00 | 42.52 | O |
| ATOM | 6615 | C | GLU | B | 393 | 17.008 | 30.636 | 39.738 | 1.00 | 26.81 | C |
| ATOM | 6616 | O | GLU | B | 393 | 17.300 | 29.955 | 40.715 | 1.00 | 27.38 | O |
| ATOM | 6617 | N | ALA | B | 394 | 17.769 | 30.686 | 38.652 | 1.00 | 26.35 | N |
| ATOM | 6619 | CA | ALA | B | 394 | 18.997 | 29.909 | 38.526 | 1.00 | 25.69 | C |
| ATOM | 6621 | CB | ALA | B | 394 | 19.486 | 29.946 | 37.113 | 1.00 | 25.51 | C |
| ATOM | 6625 | C | ALA | B | 394 | 20.073 | 30.455 | 39.462 | 1.00 | 25.37 | C |
| ATOM | 6626 | O | ALA | B | 394 | 20.877 | 29.703 | 40.026 | 1.00 | 25.18 | O |
| ATOM | 6627 | N | LEU | B | 395 | 20.112 | 31.768 | 39.607 | 1.00 | 24.61 | N |
| ATOM | 6629 | CA | LEU | B | 395 | 20.986 | 32.361 | 40.601 | 1.00 | 24.14 | C |
| ATOM | 6631 | CB | LEU | B | 395 | 21.169 | 33.848 | 40.305 | 1.00 | 23.88 | C |
| ATOM | 6634 | CG | LEU | B | 395 | 21.908 | 34.145 | 39.009 | 1.00 | 24.05 | C |
| ATOM | 6636 | CD1 | LEU | B | 395 | 21.928 | 35.653 | 38.796 | 1.00 | 25.55 | C |
| ATOM | 6640 | CD2 | LEU | B | 395 | 23.326 | 33.613 | 39.026 | 1.00 | 23.40 | C |
| ATOM | 6644 | C | LEU | B | 395 | 20.493 | 32.130 | 42.061 | 1.00 | 23.52 | C |
| ATOM | 6645 | O | LEU | B | 395 | 21.317 | 32.002 | 42.968 | 1.00 | 23.09 | O |
| ATOM | 6646 | N | GLN | B | 396 | 19.180 | 32.047 | 42.283 | 1.00 | 22.77 | N |
| ATOM | 6648 | CA | GLN | B | 396 | 18.659 | 31.911 | 43.649 | 1.00 | 22.84 | C |

| ATOM | 6650 | CB  | GLN B 396 | 17.137 | 32.134 | 43.685 | 1.00 | 22.46 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 6653 | CG  | GLN B 396 | 16.597 | 32.351 | 45.121 | 1.00 | 21.86 | C |
| ATOM | 6656 | CD  | GLN B 396 | 15.093 | 32.230 | 45.224 | 1.00 | 22.07 | C |
| ATOM | 6657 | OE1 | GLN B 396 | 14.539 | 31.210 | 44.849 | 1.00 | 25.24 | O |
| ATOM | 6658 | NE2 | GLN B 396 | 14.430 | 33.254 | 45.748 | 1.00 | 19.98 | N |
| ATOM | 6661 | C   | GLN B 396 | 18.961 | 30.539 | 44.271 | 1.00 | 23.28 | C |
| ATOM | 6662 | O   | GLN B 396 | 19.360 | 30.409 | 45.433 | 1.00 | 22.64 | O |
| ATOM | 6663 | N   | GLN B 397 | 18.752 | 29.511 | 43.465 | 1.00 | 24.24 | N |
| ATOM | 6665 | CA  | GLN B 397 | 18.766 | 28.124 | 43.918 | 1.00 | 24.67 | C |
| ATOM | 6667 | CB  | GLN B 397 | 18.568 | 27.206 | 42.715 | 1.00 | 25.50 | C |
| ATOM | 6670 | CG  | GLN B 397 | 18.448 | 25.747 | 43.063 | 1.00 | 28.77 | C |
| ATOM | 6673 | CD  | GLN B 397 | 17.262 | 25.164 | 42.382 | 1.00 | 33.24 | C |
| ATOM | 6674 | OE1 | GLN B 397 | 17.224 | 25.139 | 41.143 | 1.00 | 36.36 | O |
| ATOM | 6675 | NE2 | GLN B 397 | 16.238 | 24.763 | 43.166 | 1.00 | 36.14 | N |
| ATOM | 6678 | C   | GLN B 397 | 20.023 | 27.708 | 44.690 | 1.00 | 23.47 | C |
| ATOM | 6679 | O   | GLN B 397 | 19.885 | 27.115 | 45.740 | 1.00 | 23.28 | O |
| ATOM | 6680 | N   | PRO B 398 | 21.232 | 27.960 | 44.178 | 1.00 | 22.21 | N |
| ATOM | 6681 | CA  | PRO B 398 | 22.429 | 27.606 | 44.954 | 1.00 | 22.07 | C |
| ATOM | 6683 | CB  | PRO B 398 | 23.595 | 28.111 | 44.067 | 1.00 | 21.81 | C |
| ATOM | 6686 | CG  | PRO B 398 | 23.038 | 28.253 | 42.719 | 1.00 | 20.81 | C |
| ATOM | 6689 | CD  | PRO B 398 | 21.588 | 28.535 | 42.866 | 1.00 | 21.52 | C |
| ATOM | 6692 | C   | PRO B 398 | 22.450 | 28.206 | 46.397 | 1.00 | 21.66 | C |
| ATOM | 6693 | O   | PRO B 398 | 22.887 | 27.547 | 47.341 | 1.00 | 21.24 | O |
| ATOM | 6694 | N   | TYR B 399 | 21.944 | 29.421 | 46.554 | 1.00 | 21.10 | N |
| ATOM | 6696 | CA  | TYR B 399 | 21.896 | 30.073 | 47.868 | 1.00 | 20.92 | C |
| ATOM | 6698 | CB  | TYR B 399 | 21.568 | 31.574 | 47.702 | 1.00 | 21.19 | C |
| ATOM | 6701 | CG  | TYR B 399 | 22.698 | 32.361 | 47.027 | 1.00 | 20.24 | C |
| ATOM | 6702 | CD1 | TYR B 399 | 22.592 | 32.808 | 45.725 | 1.00 | 18.82 | C |
| ATOM | 6704 | CE1 | TYR B 399 | 23.608 | 33.500 | 45.132 | 1.00 | 20.34 | C |
| ATOM | 6706 | CZ  | TYR B 399 | 24.768 | 33.746 | 45.842 | 1.00 | 20.91 | C |
| ATOM | 6707 | OH  | TYR B 399 | 25.843 | 34.443 | 45.306 | 1.00 | 21.63 | O |
| ATOM | 6709 | CE2 | TYR B 399 | 24.886 | 33.298 | 47.127 | 1.00 | 21.36 | C |
| ATOM | 6711 | CD2 | TYR B 399 | 23.863 | 32.624 | 47.710 | 1.00 | 20.46 | C |
| ATOM | 6713 | C   | TYR B 399 | 20.898 | 29.419 | 48.815 | 1.00 | 20.41 | C |
| ATOM | 6714 | O   | TYR B 399 | 21.106 | 29.374 | 50.016 | 1.00 | 20.38 | O |
| ATOM | 6715 | N   | VAL B 400 | 19.798 | 28.940 | 48.258 | 1.00 | 20.03 | N |
| ATOM | 6717 | CA  | VAL B 400 | 18.800 | 28.185 | 49.011 | 1.00 | 19.24 | C |
| ATOM | 6719 | CB  | VAL B 400 | 17.455 | 28.000 | 48.185 | 1.00 | 18.97 | C |
| ATOM | 6721 | CG1 | VAL B 400 | 16.494 | 27.023 | 48.871 | 1.00 | 17.82 | C |
| ATOM | 6725 | CG2 | VAL B 400 | 16.786 | 29.357 | 47.918 | 1.00 | 17.65 | C |
| ATOM | 6729 | C   | VAL B 400 | 19.392 | 26.843 | 49.403 | 1.00 | 19.00 | C |
| ATOM | 6730 | O   | VAL B 400 | 19.239 | 26.442 | 50.526 | 1.00 | 19.25 | O |
| ATOM | 6731 | N   | GLU B 401 | 20.066 | 26.165 | 48.482 | 1.00 | 18.97 | N |
| ATOM | 6733 | CA  | GLU B 401 | 20.715 | 24.902 | 48.779 | 1.00 | 19.97 | C |
| ATOM | 6735 | CB  | GLU B 401 | 21.390 | 24.353 | 47.523 | 1.00 | 20.59 | C |
| ATOM | 6738 | CG  | GLU B 401 | 20.569 | 23.320 | 46.786 | 1.00 | 25.37 | C |
| ATOM | 6741 | CD  | GLU B 401 | 20.983 | 23.073 | 45.329 | 1.00 | 32.52 | C |
| ATOM | 6742 | OE1 | GLU B 401 | 20.167 | 22.424 | 44.643 | 1.00 | 37.24 | O |

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ATOM  6743 OE2 GLU B 401    22.083 23.500 44.846 1.00 37.72      O
ATOM  6744 C   GLU B 401    21.771 25.081 49.890 1.00 19.60      C
ATOM  6745 O   GLU B 401    21.978 24.222 50.745 1.00 18.58      O
ATOM  6746 N   ALA B 402    22.438 26.227 49.833 1.00 19.35      N
ATOM  6748 CA  ALA B 402    23.497 26.565 50.741 1.00 18.74      C
ATOM  6750 CB  ALA B 402    24.162 27.859 50.273 1.00 19.13      C
ATOM  6754 C   ALA B 402    22.940 26.729 52.143 1.00 18.23      C
ATOM  6755 O   ALA B 402    23.481 26.159 53.102 1.00 17.98      O
ATOM  6756 N   LEU B 403    21.877 27.522 52.259 1.00 17.57      N
ATOM  6758 CA  LEU B 403    21.169 27.688 53.537 1.00 17.83      C
ATOM  6760 CB  LEU B 403    20.047 28.720 53.394 1.00 17.84      C
ATOM  6763 CG  LEU B 403    19.304 29.202 54.639 1.00 16.31      C
ATOM  6765 CD1 LEU B 403    20.264 29.765 55.627 1.00 15.60      C
ATOM  6769 CD2 LEU B 403    18.281 30.234 54.261 1.00 15.33      C
ATOM  6773 C   LEU B 403    20.608 26.361 54.101 1.00 18.18      C
ATOM  6774 O   LEU B 403    20.771 26.063 55.277 1.00 16.92      O
ATOM  6775 N   LEU B 404    19.958 25.561 53.253 1.00 19.14      N
ATOM  6777 CA  LEU B 404    19.502 24.242 53.668 1.00 19.76      C
ATOM  6779 CB  LEU B 404    18.981 23.431 52.490 1.00 19.91      C
ATOM  6782 CG  LEU B 404    18.399 22.043 52.790 1.00 21.43      C
ATOM  6784 CD1 LEU B 404    17.465 22.023 53.991 1.00 22.46      C
ATOM  6788 CD2 LEU B 404    17.674 21.505 51.553 1.00 21.66      C
ATOM  6792 C   LEU B 404    20.645 23.512 54.360 1.00 19.98      C
ATOM  6793 O   LEU B 404    20.527 23.151 55.518 1.00 20.33      O
ATOM  6794 N   SER B 405    21.765 23.368 53.666 1.00 20.53      N
ATOM  6796 CA  SER B 405    22.908 22.589 54.138 1.00 21.05      C
ATOM  6798 CB  SER B 405    23.900 22.377 52.998 1.00 21.36      C
ATOM  6801 OG  SER B 405    23.235 21.895 51.833 1.00 23.07      O
ATOM  6803 C   SER B 405    23.608 23.237 55.335 1.00 21.21      C
ATOM  6804 O   SER B 405    24.063 22.536 56.255 1.00 20.72      O
ATOM  6805 N   TYR B 406    23.660 24.572 55.338 1.00 21.40      N
ATOM  6807 CA  TYR B 406    24.165 25.309 56.493 1.00 21.50      C
ATOM  6809 CB  TYR B 406    24.222 26.811 56.211 1.00 21.34      C
ATOM  6812 CG  TYR B 406    24.870 27.554 57.345 1.00 21.01      C
ATOM  6813 CD1 TYR B 406    26.241 27.819 57.332 1.00 20.35      C
ATOM  6815 CE1 TYR B 406    26.859 28.471 58.379 1.00 19.54      C
ATOM  6817 CZ  TYR B 406    26.130 28.840 59.484 1.00 20.58      C
ATOM  6818 OH  TYR B 406    26.751 29.480 60.525 1.00 17.71      O
ATOM  6820 CE2 TYR B 406    24.771 28.572 59.543 1.00 21.80      C
ATOM  6822 CD2 TYR B 406    24.141 27.937 58.456 1.00 21.03      C
ATOM  6824 C   TYR B 406    23.358 25.038 57.793 1.00 21.99      C
ATOM  6825 O   TYR B 406    23.952 24.666 58.803 1.00 22.50      O
ATOM  6826 N   THR B 407    22.033 25.222 57.753 1.00 22.60      N
ATOM  6828 CA  THR B 407    21.106 24.979 58.893 1.00 23.33      C
ATOM  6830 CB  THR B 407    19.612 25.355 58.532 1.00 23.21      C
ATOM  6832 OG1 THR B 407    19.223 24.720 57.311 1.00 21.25      O
ATOM  6834 CG2 THR B 407    19.423 26.847 58.264 1.00 22.50      C
ATOM  6838 C   THR B 407    21.088 23.534 59.395 1.00 24.32      C
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 6839 | O | THR | B 407 | 20.968 | 23.288 | 60.576 | 1.00 | 23.72 | O |
| ATOM | 6840 | N | ARG | B 408 | 21.135 | 22.598 | 58.464 | 1.00 | 25.82 | N |
| ATOM | 6842 | CA | ARG | B 408 | 21.304 | 21.195 | 58.769 | 1.00 | 27.43 | C |
| ATOM | 6844 | CB | ARG | B 408 | 21.590 | 20.438 | 57.472 | 1.00 | 28.12 | C |
| ATOM | 6847 | CG | ARG | B 408 | 20.474 | 19.593 | 56.985 | 1.00 | 31.35 | C |
| ATOM | 6850 | CD | ARG | B 408 | 20.854 | 18.649 | 55.855 | 1.00 | 36.14 | C |
| ATOM | 6853 | NE | ARG | B 408 | 19.859 | 17.586 | 55.832 | 1.00 | 40.97 | N |
| ATOM | 6855 | CZ | ARG | B 408 | 18.659 | 17.664 | 55.248 | 1.00 | 44.02 | C |
| ATOM | 6856 | NH1 | ARG | B 408 | 18.292 | 18.752 | 54.556 | 1.00 | 43.40 | N |
| ATOM | 6859 | NH2 | ARG | B 408 | 17.831 | 16.616 | 55.341 | 1.00 | 45.66 | N |
| ATOM | 6862 | C | ARG | B 408 | 22.499 | 20.970 | 59.680 | 1.00 | 27.90 | C |
| ATOM | 6863 | O | ARG | B 408 | 22.448 | 20.213 | 60.656 | 1.00 | 27.33 | O |
| ATOM | 6864 | N | ILE | B 409 | 23.600 | 21.602 | 59.303 | 1.00 | 28.65 | N |
| ATOM | 6866 | CA | ILE | B 409 | 24.874 | 21.315 | 59.925 | 1.00 | 29.43 | C |
| ATOM | 6868 | CB | ILE | B 409 | 26.031 | 21.700 | 58.981 | 1.00 | 29.63 | C |
| ATOM | 6870 | CG1 | ILE | B 409 | 26.238 | 20.585 | 57.942 | 1.00 | 30.42 | C |
| ATOM | 6873 | CD1 | ILE | B 409 | 27.234 | 20.919 | 56.829 | 1.00 | 31.02 | C |
| ATOM | 6877 | CG2 | ILE | B 409 | 27.305 | 21.931 | 59.766 | 1.00 | 29.94 | C |
| ATOM | 6881 | C | ILE | B 409 | 24.974 | 21.995 | 61.286 | 1.00 | 29.71 | C |
| ATOM | 6882 | O | ILE | B 409 | 25.365 | 21.354 | 62.257 | 1.00 | 29.24 | O |
| ATOM | 6883 | N | LYS | B 410 | 24.610 | 23.279 | 61.339 | 1.00 | 30.37 | N |
| ATOM | 6885 | CA | LYS | B 410 | 24.637 | 24.068 | 62.575 | 1.00 | 30.83 | C |
| ATOM | 6887 | CB | LYS | B 410 | 24.243 | 25.526 | 62.291 | 1.00 | 31.05 | C |
| ATOM | 6890 | CG | LYS | B 410 | 24.126 | 26.442 | 63.533 | 1.00 | 31.09 | C |
| ATOM | 6893 | CD | LYS | B 410 | 23.712 | 27.862 | 63.142 | 1.00 | 31.05 | C |
| ATOM | 6896 | CE | LYS | B 410 | 23.132 | 28.662 | 64.308 | 1.00 | 30.78 | C |
| ATOM | 6899 | NZ | LYS | B 410 | 23.280 | 30.140 | 64.067 | 1.00 | 30.57 | N |
| ATOM | 6903 | C | LYS | B 410 | 23.699 | 23.487 | 63.624 | 1.00 | 31.13 | C |
| ATOM | 6904 | O | LYS | B 410 | 24.025 | 23.455 | 64.812 | 1.00 | 31.02 | O |
| ATOM | 6905 | N | ARG | B 411 | 22.530 | 23.037 | 63.175 | 1.00 | 31.60 | N |
| ATOM | 6907 | CA | ARG | B 411 | 21.484 | 22.548 | 64.071 | 1.00 | 32.04 | C |
| ATOM | 6909 | CB | ARG | B 411 | 20.398 | 23.626 | 64.262 | 1.00 | 32.46 | C |
| ATOM | 6912 | CG | ARG | B 411 | 20.909 | 24.977 | 64.766 | 1.00 | 35.17 | C |
| ATOM | 6915 | CD | ARG | B 411 | 21.177 | 25.100 | 66.289 | 1.00 | 39.41 | C |
| ATOM | 6918 | NE | ARG | B 411 | 20.672 | 26.400 | 66.733 | 1.00 | 44.08 | N |
| ATOM | 6920 | CZ | ARG | B 411 | 19.422 | 26.642 | 67.180 | 1.00 | 47.09 | C |
| ATOM | 6921 | NH1 | ARG | B 411 | 18.531 | 25.648 | 67.319 | 1.00 | 47.14 | N |
| ATOM | 6924 | NH2 | ARG | B 411 | 19.065 | 27.896 | 67.511 | 1.00 | 47.17 | N |
| ATOM | 6927 | C | ARG | B 411 | 20.855 | 21.246 | 63.556 | 1.00 | 31.31 | C |
| ATOM | 6928 | O | ARG | B 411 | 19.684 | 21.237 | 63.219 | 1.00 | 30.81 | O |
| ATOM | 6929 | N | PRO | B 412 | 21.608 | 20.143 | 63.547 | 1.00 | 31.11 | N |
| ATOM | 6930 | CA | PRO | B 412 | 21.108 | 18.848 | 63.040 | 1.00 | 31.04 | C |
| ATOM | 6932 | CB | PRO | B 412 | 22.198 | 17.853 | 63.471 | 1.00 | 31.06 | C |
| ATOM | 6935 | CG | PRO | B 412 | 23.020 | 18.585 | 64.489 | 1.00 | 31.09 | C |
| ATOM | 6938 | CD | PRO | B 412 | 22.979 | 20.022 | 64.073 | 1.00 | 31.04 | C |
| ATOM | 6941 | C | PRO | B 412 | 19.764 | 18.424 | 63.622 | 1.00 | 30.98 | C |
| ATOM | 6942 | O | PRO | B 412 | 18.990 | 17.774 | 62.924 | 1.00 | 30.55 | O |
| ATOM | 6943 | N | GLN | B 413 | 19.487 | 18.838 | 64.857 | 1.00 | 31.37 | N |

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ATOM  6945 CA  GLN B 413    18.318 18.385 65.608 1.00 31.76    C
ATOM  6947 CB  GLN B 413    18.699 18.182 67.085 1.00 31.90    C
ATOM  6950 CG  GLN B 413    19.976 17.345 67.302 1.00 32.92    C
ATOM  6953 CD  GLN B 413    19.728 15.837 67.190 1.00 34.63    C
ATOM  6954 OE1 GLN B 413    19.739 15.251 66.089 1.00 33.84    O
ATOM  6955 NE2 GLN B 413    19.501 15.205 68.339 1.00 36.01    N
ATOM  6958 C   GLN B 413    17.098 19.310 65.515 1.00 31.52    C
ATOM  6959 O   GLN B 413    16.098 19.054 66.177 1.00 31.68    O
ATOM  6960 N   ASP B 414    17.171 20.364 64.706 1.00 31.28    N
ATOM  6962 CA  ASP B 414    16.031 21.264 64.510 1.00 31.37    C
ATOM  6964 CB  ASP B 414    16.344 22.671 65.012 1.00 31.36    C
ATOM  6967 CG  ASP B 414    15.105 23.531 65.122 1.00 33.05    C
ATOM  6968 OD1 ASP B 414    14.044 23.162 64.562 1.00 35.59    O
ATOM  6969 OD2 ASP B 414    15.095 24.602 65.757 1.00 35.48    O
ATOM  6970 C   ASP B 414    15.601 21.326 63.049 1.00 31.09    C
ATOM  6971 O   ASP B 414    15.951 22.256 62.313 1.00 31.09    O
ATOM  6972 N   GLN B 415    14.804 20.342 62.651 1.00 30.85    N
ATOM  6974 CA  GLN B 415    14.387 20.190 61.256 1.00 30.59    C
ATOM  6976 CB  GLN B 415    13.764 18.790 61.032 1.00 31.09    C
ATOM  6979 CG  GLN B 415    14.780 17.634 60.807 1.00 33.66    C
ATOM  6982 CD  GLN B 415    15.899 17.986 59.796 1.00 38.47    C
ATOM  6983 OE1 GLN B 415    17.104 17.943 60.134 1.00 41.48    O
ATOM  6984 NE2 GLN B 415    15.504 18.353 58.566 1.00 40.87    N
ATOM  6987 C   GLN B 415    13.440 21.313 60.775 1.00 29.62    C
ATOM  6988 O   GLN B 415    13.273 21.495 59.551 1.00 29.23    O
ATOM  6989 N   LEU B 416    12.854 22.063 61.724 1.00 28.51    N
ATOM  6991 CA  LEU B 416    11.926 23.172 61.412 1.00 27.87    C
ATOM  6993 CB  LEU B 416    10.832 23.271 62.475 1.00 27.63    C
ATOM  6996 CG  LEU B 416     9.753 22.197 62.482 1.00 27.17    C
ATOM  6998 CD1 LEU B 416     8.690 22.614 63.488 1.00 26.60    C
ATOM  7002 CD2 LEU B 416     9.154 21.951 61.090 1.00 26.52    C
ATOM  7006 C   LEU B 416    12.557 24.560 61.301 1.00 27.40    C
ATOM  7007 O   LEU B 416    11.872 25.525 60.974 1.00 27.02    O
ATOM  7008 N   ARG B 417    13.847 24.678 61.574 1.00 27.00    N
ATOM  7010 CA  ARG B 417    14.467 26.003 61.585 1.00 26.48    C
ATOM  7012 CB  ARG B 417    15.822 25.986 62.321 1.00 26.93    C
ATOM  7015 CG  ARG B 417    16.894 26.860 61.699 1.00 27.72    C
ATOM  7018 CD  ARG B 417    18.315 26.647 62.233 1.00 28.01    C
ATOM  7021 NE  ARG B 417    18.987 27.942 62.348 1.00 26.38    N
ATOM  7023 CZ  ARG B 417    18.760 28.798 63.305 1.00 23.60    C
ATOM  7024 NH1 ARG B 417    17.913 28.490 64.272 1.00 23.64    N
ATOM  7027 NH2 ARG B 417    19.387 29.956 63.287 1.00 23.29    N
ATOM  7030 C   ARG B 417    14.591 26.515 60.159 1.00 25.26    C
ATOM  7031 O   ARG B 417    14.311 27.673 59.905 1.00 25.17    O
ATOM  7032 N   PHE B 418    14.991 25.657 59.230 1.00 23.86    N
ATOM  7034 CA  PHE B 418    15.044 26.080 57.839 1.00 23.32    C
ATOM  7036 CB  PHE B 418    15.593 24.980 56.956 1.00 23.41    C
ATOM  7039 CG  PHE B 418    15.727 25.371 55.529 1.00 24.28    C
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ATOM  7040  CD1 PHE B 418    16.458 26.480 55.180 1.00 25.62      C
ATOM  7042  CE1 PHE B 418    16.607 26.847 53.871 1.00 28.16      C
ATOM  7044  CZ  PHE B 418    16.022 26.090 52.868 1.00 29.91      C
ATOM  7046  CE2 PHE B 418    15.286 24.965 53.207 1.00 28.48      C
ATOM  7048  CD2 PHE B 418    15.137 24.618 54.538 1.00 26.82      C
ATOM  7050  C   PHE B 418    13.697 26.561 57.282 1.00 23.02      C
ATOM  7051  O   PHE B 418    13.657 27.627 56.697 1.00 22.33      O
ATOM  7052  N   PRO B 419    12.612 25.783 57.429 1.00 22.91      N
ATOM  7053  CA  PRO B 419    11.284 26.233 57.016 1.00 22.93      C
ATOM  7055  CB  PRO B 419    10.349 25.107 57.508 1.00 22.95      C
ATOM  7058  CG  PRO B 419    11.155 23.916 57.474 1.00 22.86      C
ATOM  7061  CD  PRO B 419    12.530 24.400 57.931 1.00 23.56      C
ATOM  7064  C   PRO B 419    10.900 27.544 57.635 1.00 23.02      C
ATOM  7065  O   PRO B 419    10.437 28.399 56.875 1.00 22.94      O
ATOM  7066  N   ARG B 420    11.114 27.717 58.942 1.00 23.41      N
ATOM  7068  CA  ARG B 420    10.786 28.985 59.603 1.00 24.16      C
ATOM  7070  CB  ARG B 420    11.108 28.972 61.081 1.00 24.28      C
ATOM  7073  CG  ARG B 420    10.080 28.246 61.896 1.00 26.85      C
ATOM  7076  CD  ARG B 420    10.218 28.401 63.384 1.00 30.77      C
ATOM  7079  NE  ARG B 420     9.654 27.233 64.062 1.00 34.79      N
ATOM  7081  CZ  ARG B 420    10.346 26.168 64.516 1.00 38.50      C
ATOM  7082  NH1 ARG B 420    11.681 26.086 64.397 1.00 39.26      N
ATOM  7085  NH2 ARG B 420     9.682 25.163 65.106 1.00 39.37      N
ATOM  7088  C   ARG B 420    11.537 30.103 58.952 1.00 24.82      C
ATOM  7089  O   ARG B 420    10.989 31.189 58.807 1.00 26.27      O
ATOM  7090  N   MET B 421    12.776 29.845 58.530 1.00 24.91      N
ATOM  7092  CA  MET B 421    13.553 30.868 57.843 1.00 25.26      C
ATOM  7094  CB  MET B 421    14.970 30.397 57.577 1.00 25.40      C
ATOM  7097  CG  MET B 421    15.826 30.434 58.849 1.00 27.21      C
ATOM  7100  SD  MET B 421    17.544 30.165 58.566 1.00 27.35      S
ATOM  7101  CE  MET B 421    17.757 31.547 57.546 1.00 30.33      C
ATOM  7105  C   MET B 421    12.898 31.328 56.559 1.00 25.31      C
ATOM  7106  O   MET B 421    12.606 32.520 56.412 1.00 24.94      O
ATOM  7107  N   LEU B 422    12.655 30.387 55.642 1.00 25.81      N
ATOM  7109  CA  LEU B 422    11.937 30.683 54.389 1.00 26.03      C
ATOM  7111  CB  LEU B 422    11.675 29.424 53.544 1.00 25.89      C
ATOM  7114  CG  LEU B 422    12.856 28.593 53.058 1.00 26.90      C
ATOM  7116  CD1 LEU B 422    12.349 27.425 52.241 1.00 28.42      C
ATOM  7120  CD2 LEU B 422    13.830 29.394 52.258 1.00 27.83      C
ATOM  7124  C   LEU B 422    10.601 31.383 54.677 1.00 25.93      C
ATOM  7125  O   LEU B 422    10.209 32.268 53.919 1.00 26.08      O
ATOM  7126  N   MET B 423     9.915 31.017 55.766 1.00 25.24      N
ATOM  7128  CA  MET B 423     8.633 31.637 56.062 1.00 25.20      C
ATOM  7130  CB  MET B 423     7.953 30.976 57.263 1.00 26.12      C
ATOM  7133  CG  MET B 423     7.525 29.546 57.077 1.00 29.14      C
ATOM  7136  SD  MET B 423     6.110 29.354 56.027 1.00 33.88      S
ATOM  7137  CE  MET B 423     5.398 27.865 56.718 1.00 31.87      C
ATOM  7141  C   MET B 423     8.812 33.130 56.364 1.00 24.01      C
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ATOM  7142  O   MET B 423      7.873 33.891 56.259 1.00 24.04        O
ATOM  7143  N   LYS B 424      9.993 33.557 56.780 1.00 22.48        N
ATOM  7145  CA  LYS B 424     10.208 34.982 56.972 1.00 21.56        C
ATOM  7147  CB  LYS B 424     11.478 35.290 57.792 1.00 21.39        C
ATOM  7150  CG  LYS B 424     11.493 34.587 59.158 1.00 22.03        C
ATOM  7153  CD  LYS B 424     10.557 35.305 60.148 1.00 25.08        C
ATOM  7156  CE  LYS B 424     10.012 34.408 61.295 1.00 25.53        C
ATOM  7159  NZ  LYS B 424      9.429 33.142 60.779 1.00 26.17        N
ATOM  7163  C   LYS B 424     10.198 35.707 55.635 1.00 20.62        C
ATOM  7164  O   LYS B 424      9.785 36.856 55.601 1.00 20.46        O
ATOM  7165  N   LEU B 425     10.606 35.069 54.533 1.00 19.60        N
ATOM  7167  CA  LEU B 425     10.422 35.708 53.223 1.00 19.55        C
ATOM  7169  CB  LEU B 425     11.035 34.913 52.090 1.00 19.54        C
ATOM  7172  CG  LEU B 425     12.505 34.601 52.232 1.00 21.54        C
ATOM  7174  CD1 LEU B 425     12.869 33.566 51.211 1.00 23.40        C
ATOM  7178  CD2 LEU B 425     13.352 35.834 52.060 1.00 22.49        C
ATOM  7182  C   LEU B 425      8.938 35.944 52.908 1.00 19.31        C
ATOM  7183  O   LEU B 425      8.581 36.844 52.167 1.00 19.19        O
ATOM  7184  N   VAL B 426      8.067 35.120 53.458 1.00 19.66        N
ATOM  7186  CA  VAL B 426      6.624 35.318 53.304 1.00 19.82        C
ATOM  7188  CB  VAL B 426      5.810 34.102 53.825 1.00 19.55        C
ATOM  7190  CG1 VAL B 426      4.326 34.417 53.825 1.00 18.92        C
ATOM  7194  CG2 VAL B 426      6.122 32.843 52.986 1.00 19.22        C
ATOM  7198  C   VAL B 426      6.207 36.568 54.050 1.00 20.19        C
ATOM  7199  O   VAL B 426      5.549 37.418 53.511 1.00 20.87        O
ATOM  7200  N   SER B 427      6.624 36.694 55.296 1.00 20.79        N
ATOM  7202  CA  SER B 427      6.278 37.863 56.087 1.00 21.20        C
ATOM  7204  CB  SER B 427      6.894 37.764 57.497 1.00 21.36        C
ATOM  7207  OG  SER B 427      6.259 36.781 58.288 1.00 22.31        O
ATOM  7209  C   SER B 427      6.790 39.129 55.428 1.00 21.16        C
ATOM  7210  O   SER B 427      6.201 40.177 55.582 1.00 20.49        O
ATOM  7211  N   LEU B 428      7.924 39.027 54.738 1.00 21.51        N
ATOM  7213  CA  LEU B 428      8.587 40.206 54.213 1.00 21.87        C
ATOM  7215  CB  LEU B 428     10.006 39.877 53.752 1.00 22.01        C
ATOM  7218  CG  LEU B 428     11.072 39.857 54.846 1.00 22.00        C
ATOM  7220  CD1 LEU B 428     12.358 39.137 54.352 1.00 22.22        C
ATOM  7224  CD2 LEU B 428     11.375 41.269 55.310 1.00 21.90        C
ATOM  7228  C   LEU B 428      7.778 40.809 53.079 1.00 22.12        C
ATOM  7229  O   LEU B 428      7.788 42.016 52.901 1.00 21.40        O
ATOM  7230  N   ARG B 429      7.072 39.969 52.330 1.00 23.03        N
ATOM  7232  CA  ARG B 429      6.227 40.446 51.244 1.00 24.02        C
ATOM  7234  CB  ARG B 429      5.613 39.303 50.412 1.00 24.16        C
ATOM  7237  CG  ARG B 429      6.557 38.518 49.526 1.00 24.59        C
ATOM  7240  CD  ARG B 429      7.456 39.354 48.604 1.00 25.32        C
ATOM  7243  NE  ARG B 429      8.494 38.543 47.975 1.00 24.69        N
ATOM  7245  CZ  ARG B 429      8.371 37.961 46.791 1.00 26.36        C
ATOM  7246  NH1 ARG B 429      7.272 38.102 46.064 1.00 26.96        N
ATOM  7249  NH2 ARG B 429      9.355 37.221 46.331 1.00 27.37        N
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ATOM  7252  C    ARG B 429    5.106 41.270 51.814 1.00 24.59    C
ATOM  7253  O    ARG B 429    4.804 42.352 51.315 1.00 26.17    O
ATOM  7254  N    THR B 430    4.444 40.774 52.838 1.00 24.58    N
ATOM  7256  CA   THR B 430    3.337 41.547 53.388 1.00 24.82    C
ATOM  7258  CB   THR B 430    2.507 40.728 54.397 1.00 25.23    C
ATOM  7260  OG1  THR B 430    1.626 39.824 53.700 1.00 27.17    O
ATOM  7262  CG2  THR B 430    1.571 41.634 55.145 1.00 26.41    C
ATOM  7266  C    THR B 430    3.842 42.825 54.027 1.00 24.07    C
ATOM  7267  O    THR B 430    3.180 43.824 53.964 1.00 24.19    O
ATOM  7268  N    LEU B 431    5.015 42.783 54.636 1.00 23.83    N
ATOM  7270  CA   LEU B 431    5.598 43.946 55.276 1.00 23.82    C
ATOM  7272  CB   LEU B 431    6.853 43.566 56.053 1.00 24.30    C
ATOM  7275  CG   LEU B 431    6.814 43.380 57.565 1.00 25.96    C
ATOM  7277  CD1  LEU B 431    5.442 43.604 58.172 1.00 27.20    C
ATOM  7281  CD2  LEU B 431    7.349 42.013 57.897 1.00 28.21    C
ATOM  7285  C    LEU B 431    5.977 44.975 54.239 1.00 23.26    C
ATOM  7286  O    LEU B 431    5.923 46.176 54.492 1.00 22.84    O
ATOM  7287  N    SER B 432    6.373 44.498 53.069 1.00 22.92    N
ATOM  7289  CA   SER B 432    6.604 45.391 51.952 1.00 22.82    C
ATOM  7291  CB   SER B 432    7.100 44.653 50.732 1.00 22.84    C
ATOM  7294  OG   SER B 432    7.207 45.556 49.655 1.00 23.55    O
ATOM  7296  C    SER B 432    5.341 46.132 51.589 1.00 22.67    C
ATOM  7297  O    SER B 432    5.423 47.296 51.315 1.00 22.90    O
ATOM  7298  N    SER B 433    4.181 45.476 51.580 1.00 22.72    N
ATOM  7300  CA   SER B 433    2.907 46.183 51.309 1.00 23.00    C
ATOM  7302  CB   SER B 433    1.705 45.224 51.154 1.00 23.28    C
ATOM  7305  OG   SER B 433    1.809 44.429 49.973 1.00 27.58    O
ATOM  7307  C    SER B 433    2.576 47.187 52.388 1.00 21.87    C
ATOM  7308  O    SER B 433    2.144 48.289 52.103 1.00 21.06    O
ATOM  7309  N    VAL B 434    2.771 46.786 53.635 1.00 21.22    N
ATOM  7311  CA   VAL B 434    2.437 47.642 54.749 1.00 20.81    C
ATOM  7313  CB   VAL B 434    2.627 46.887 56.091 1.00 20.75    C
ATOM  7315  CG1  VAL B 434    2.403 47.788 57.295 1.00 20.51    C
ATOM  7319  CG2  VAL B 434    1.656 45.736 56.178 1.00 21.14    C
ATOM  7323  C    VAL B 434    3.277 48.928 54.648 1.00 20.36    C
ATOM  7324  O    VAL B 434    2.819 49.996 55.001 1.00 19.94    O
ATOM  7325  N    HIS B 435    4.489 48.824 54.130 1.00 20.35    N
ATOM  7327  CA   HIS B 435    5.350 49.981 53.997 1.00 20.72    C
ATOM  7329  CB   HIS B 435    6.791 49.571 53.668 1.00 20.92    C
ATOM  7332  CG   HIS B 435    7.678 50.733 53.347 1.00 21.42    C
ATOM  7333  ND1  HIS B 435    8.403 50.814 52.179 1.00 20.55    N
ATOM  7335  CE1  HIS B 435    9.084 51.948 52.173 1.00 21.02    C
ATOM  7337  NE2  HIS B 435    8.795 52.624 53.273 1.00 20.03    N
ATOM  7339  CD2  HIS B 435    7.912 51.889 54.022 1.00 20.83    C
ATOM  7341  C    HIS B 435    4.831 50.921 52.924 1.00 20.87    C
ATOM  7342  O    HIS B 435    4.832 52.144 53.085 1.00 20.81    O
ATOM  7343  N    SER B 436    4.385 50.357 51.824 1.00 21.23    N
ATOM  7345  CA   SER B 436    3.737 51.169 50.803 1.00 21.81    C
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ATOM  7347 CB  SER B 436    3.417 50.312 49.584 1.00 21.64    C
ATOM  7350 OG  SER B 436    4.630 49.798 49.024 1.00 21.73    O
ATOM  7352 C   SER B 436    2.493 51.904 51.338 1.00 22.24    C
ATOM  7353 O   SER B 436    2.269 53.043 50.995 1.00 22.27    O
ATOM  7354 N   GLU B 437    1.709 51.240 52.181 1.00 23.51    N
ATOM  7356 CA  GLU B 437    0.548 51.827 52.856 1.00 24.49    C
ATOM  7358 CB  GLU B 437   -0.209 50.754 53.671 1.00 24.99    C
ATOM  7361 CG  GLU B 437   -1.228 49.931 52.862 1.00 28.62    C
ATOM  7364 CD  GLU B 437   -1.545 48.518 53.432 1.00 33.03    C
ATOM  7365 OE1 GLU B 437   -1.696 47.556 52.624 1.00 35.00    O
ATOM  7366 OE2 GLU B 437   -1.657 48.345 54.671 1.00 33.87    O
ATOM  7367 C   GLU B 437    1.006 52.968 53.771 1.00 24.70    C
ATOM  7368 O   GLU B 437    0.335 54.007 53.864 1.00 24.42    O
ATOM  7369 N   GLN B 438    2.155 52.772 54.424 1.00 24.99    N
ATOM  7371 CA  GLN B 438    2.742 53.772 55.314 1.00 25.30    C
ATOM  7373 CB  GLN B 438    3.912 53.186 56.108 1.00 24.95    C
ATOM  7376 CG  GLN B 438    4.750 54.232 56.863 1.00 24.18    C
ATOM  7379 CD  GLN B 438    4.012 54.826 58.049 1.00 23.98    C
ATOM  7380 OE1 GLN B 438    4.097 54.283 59.143 1.00 24.29    O
ATOM  7381 NE2 GLN B 438    3.295 55.930 57.843 1.00 22.11    N
ATOM  7384 C   GLN B 438    3.207 55.039 54.582 1.00 26.53    C
ATOM  7385 O   GLN B 438    2.925 56.139 55.064 1.00 25.78    O
ATOM  7386 N   VAL B 439    3.943 54.882 53.465 1.00 28.03    N
ATOM  7388 CA  VAL B 439    4.355 56.019 52.617 1.00 29.51    C
ATOM  7390 CB  VAL B 439    5.366 55.646 51.446 1.00 29.86    C
ATOM  7392 CG1 VAL B 439    6.675 55.089 51.971 1.00 30.85    C
ATOM  7396 CG2 VAL B 439    4.785 54.643 50.495 1.00 31.33    C
ATOM  7400 C   VAL B 439    3.133 56.710 52.015 1.00 30.36    C
ATOM  7401 O   VAL B 439    3.102 57.944 51.858 1.00 30.23    O
ATOM  7402 N   PHE B 440    2.113 55.925 51.691 1.00 31.79    N
ATOM  7404 CA  PHE B 440    0.884 56.523 51.209 1.00 33.28    C
ATOM  7406 CB  PHE B 440   -0.177 55.481 50.799 1.00 33.50    C
ATOM  7409 CG  PHE B 440   -1.397 56.109 50.175 1.00 35.31    C
ATOM  7410 CD1 PHE B 440   -1.357 56.572 48.848 1.00 37.12    C
ATOM  7412 CE1 PHE B 440   -2.458 57.188 48.277 1.00 36.48    C
ATOM  7414 CZ  PHE B 440   -3.613 57.377 49.041 1.00 36.71    C
ATOM  7416 CE2 PHE B 440   -3.660 56.946 50.364 1.00 36.17    C
ATOM  7418 CD2 PHE B 440   -2.551 56.322 50.927 1.00 36.31    C
ATOM  7420 C   PHE B 440    0.379 57.442 52.319 1.00 33.80    C
ATOM  7421 O   PHE B 440    0.318 58.651 52.152 1.00 33.44    O
ATOM  7422 N   ALA B 441    0.093 56.843 53.471 1.00 35.03    N
ATOM  7424 CA  ALA B 441   -0.382 57.555 54.654 1.00 35.88    C
ATOM  7426 CB  ALA B 441   -0.533 56.566 55.813 1.00 35.75    C
ATOM  7430 C   ALA B 441    0.485 58.754 55.097 1.00 36.81    C
ATOM  7431 O   ALA B 441   -0.035 59.685 55.725 1.00 37.00    O
ATOM  7432 N   LEU B 442    1.782 58.735 54.782 1.00 37.81    N
ATOM  7434 CA  LEU B 442    2.689 59.798 55.206 1.00 38.67    C
ATOM  7436 CB  LEU B 442    4.139 59.354 55.124 1.00 38.52    C
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| ATOM | 7439 | CG | LEU B 442 | 4.636 | 58.724 | 56.433 | 1.00 | 38.11 | C |
|------|------|------|-----------|-------|--------|--------|------|-------|---|
| ATOM | 7441 | CD1 | LEU B 442 | 5.920 | 57.978 | 56.176 | 1.00 | 37.89 | C |
| ATOM | 7445 | CD2 | LEU B 442 | 4.839 | 59.754 | 57.535 | 1.00 | 37.08 | C |
| ATOM | 7449 | C | LEU B 442 | 2.517 | 61.082 | 54.411 | 1.00 | 40.14 | C |
| ATOM | 7450 | O | LEU B 442 | 2.765 | 62.165 | 54.934 | 1.00 | 40.85 | O |
| ATOM | 7451 | N | ARG B 443 | 2.090 | 60.982 | 53.159 | 1.00 | 41.45 | N |
| ATOM | 7453 | CA | ARG B 443 | 1.875 | 62.178 | 52.332 | 1.00 | 42.28 | C |
| ATOM | 7455 | CB | ARG B 443 | 1.702 | 61.772 | 50.869 | 1.00 | 42.73 | C |
| ATOM | 7458 | CG | ARG B 443 | 2.904 | 61.040 | 50.284 | 1.00 | 43.42 | C |
| ATOM | 7461 | CD | ARG B 443 | 2.729 | 60.693 | 48.821 | 1.00 | 45.87 | C |
| ATOM | 7464 | NE | ARG B 443 | 2.899 | 61.842 | 47.916 | 1.00 | 47.49 | N |
| ATOM | 7466 | CZ | ARG B 443 | 2.812 | 61.776 | 46.580 | 1.00 | 48.94 | C |
| ATOM | 7467 | NH1 | ARG B 443 | 2.554 | 60.622 | 45.960 | 1.00 | 49.43 | N |
| ATOM | 7470 | NH2 | ARG B 443 | 2.988 | 62.868 | 45.846 | 1.00 | 49.74 | N |
| ATOM | 7473 | C | ARG B 443 | 0.693 | 63.052 | 52.783 | 1.00 | 42.62 | C |
| ATOM | 7474 | O | ARG B 443 | 0.659 | 64.248 | 52.492 | 1.00 | 42.56 | O |
| ATOM | 7475 | N | LEU B 444 | -0.261 | 62.456 | 53.499 | 1.00 | 43.25 | N |
| ATOM | 7477 | CA | LEU B 444 | -1.393 | 63.203 | 54.072 | 1.00 | 43.67 | C |
| ATOM | 7479 | CB | LEU B 444 | -2.505 | 62.274 | 54.606 | 1.00 | 44.00 | C |
| ATOM | 7482 | CG | LEU B 444 | -2.912 | 60.948 | 53.946 | 1.00 | 44.89 | C |
| ATOM | 7484 | CD1 | LEU B 444 | -3.840 | 60.183 | 54.916 | 1.00 | 44.64 | C |
| ATOM | 7488 | CD2 | LEU B 444 | -3.571 | 61.163 | 52.571 | 1.00 | 45.14 | C |
| ATOM | 7492 | C | LEU B 444 | -0.964 | 64.072 | 55.244 | 1.00 | 43.57 | C |
| ATOM | 7493 | O | LEU B 444 | -1.767 | 64.833 | 55.767 | 1.00 | 43.90 | O |
| ATOM | 7494 | N | GLN B 445 | 0.279 | 63.930 | 55.687 | 1.00 | 43.43 | N |
| ATOM | 7496 | CA | GLN B 445 | 0.759 | 64.627 | 56.879 | 1.00 | 43.35 | C |
| ATOM | 7498 | CB | GLN B 445 | 1.100 | 63.624 | 58.015 | 1.00 | 43.42 | C |
| ATOM | 7501 | CG | GLN B 445 | 0.707 | 62.147 | 57.735 | 1.00 | 44.19 | C |
| ATOM | 7504 | CD | GLN B 445 | 0.126 | 61.412 | 58.927 | 1.00 | 44.36 | C |
| ATOM | 7505 | OE1 | GLN B 445 | 0.823 | 60.623 | 59.559 | 1.00 | 45.11 | O |
| ATOM | 7506 | NE2 | GLN B 445 | -1.155 | 61.646 | 59.220 | 1.00 | 43.92 | N |
| ATOM | 7509 | C | GLN B 445 | 1.958 | 65.515 | 56.508 | 1.00 | 43.00 | C |
| ATOM | 7510 | O | GLN B 445 | 2.807 | 65.809 | 57.352 | 1.00 | 43.42 | O |
| ATOM | 7511 | N | ASP B 446 | 2.004 | 65.954 | 55.245 | 1.00 | 42.48 | N |
| ATOM | 7513 | CA | ASP B 446 | 3.054 | 66.859 | 54.724 | 1.00 | 41.88 | C |
| ATOM | 7515 | CB | ASP B 446 | 3.150 | 68.157 | 55.583 | 1.00 | 42.24 | C |
| ATOM | 7518 | CG | ASP B 446 | 2.425 | 69.372 | 54.954 | 1.00 | 43.60 | C |
| ATOM | 7519 | OD1 | ASP B 446 | 2.283 | 69.440 | 53.705 | 1.00 | 44.77 | O |
| ATOM | 7520 | OD2 | ASP B 446 | 1.986 | 70.328 | 55.654 | 1.00 | 45.73 | O |
| ATOM | 7521 | C | ASP B 446 | 4.435 | 66.163 | 54.600 | 1.00 | 40.47 | C |
| ATOM | 7522 | O | ASP B 446 | 5.475 | 66.823 | 54.481 | 1.00 | 40.55 | O |
| ATOM | 7523 | N | LYS B 447 | 4.443 | 64.834 | 54.599 | 1.00 | 38.43 | N |
| ATOM | 7525 | CA | LYS B 447 | 5.693 | 64.099 | 54.620 | 1.00 | 37.05 | C |
| ATOM | 7527 | CB | LYS B 447 | 5.768 | 63.228 | 55.883 | 1.00 | 37.04 | C |
| ATOM | 7530 | CG | LYS B 447 | 5.925 | 64.038 | 57.192 | 1.00 | 36.58 | C |
| ATOM | 7533 | CD | LYS B 447 | 6.149 | 63.134 | 58.382 | 1.00 | 36.12 | C |
| ATOM | 7536 | CE | LYS B 447 | 6.249 | 63.897 | 59.653 | 1.00 | 35.81 | C |
| ATOM | 7539 | NZ | LYS B 447 | 4.944 | 64.489 | 59.979 | 1.00 | 36.74 | N |

| ATOM | 7543 | C | LYS B 447 | 5.885 | 63.284 | 53.334 | 1.00 | 36.02 | C |
| ATOM | 7544 | O | LYS B 447 | 5.567 | 62.091 | 53.266 | 1.00 | 36.06 | O |
| ATOM | 7545 | N | LYS B 448 | 6.408 | 63.958 | 52.311 | 1.00 | 34.70 | N |
| ATOM | 7547 | CA | LYS B 448 | 6.759 | 63.325 | 51.039 | 1.00 | 33.31 | C |
| ATOM | 7549 | CB | LYS B 448 | 6.669 | 64.320 | 49.883 | 1.00 | 33.27 | C |
| ATOM | 7552 | CG | LYS B 448 | 5.275 | 64.890 | 49.699 | 1.00 | 34.19 | C |
| ATOM | 7555 | CD | LYS B 448 | 5.283 | 66.251 | 49.021 | 1.00 | 34.98 | C |
| ATOM | 7558 | CE | LYS B 448 | 4.235 | 67.183 | 49.621 | 1.00 | 35.27 | C |
| ATOM | 7561 | NZ | LYS B 448 | 3.627 | 68.028 | 48.576 | 1.00 | 34.97 | N |
| ATOM | 7565 | C | LYS B 448 | 8.169 | 62.832 | 51.140 | 1.00 | 31.74 | C |
| ATOM | 7566 | O | LYS B 448 | 9.022 | 63.518 | 51.685 | 1.00 | 31.55 | O |
| ATOM | 7567 | N | LEU B 449 | 8.412 | 61.642 | 50.608 | 1.00 | 30.04 | N |
| ATOM | 7569 | CA | LEU B 449 | 9.750 | 61.071 | 50.579 | 1.00 | 28.75 | C |
| ATOM | 7571 | CB | LEU B 449 | 9.701 | 59.675 | 49.961 | 1.00 | 28.54 | C |
| ATOM | 7574 | CG | LEU B 449 | 8.773 | 58.628 | 50.582 | 1.00 | 28.08 | C |
| ATOM | 7576 | CD1 | LEU B 449 | 8.490 | 57.527 | 49.579 | 1.00 | 27.98 | C |
| ATOM | 7580 | CD2 | LEU B 449 | 9.369 | 58.038 | 51.852 | 1.00 | 27.62 | C |
| ATOM | 7584 | C | LEU B 449 | 10.660 | 61.982 | 49.748 | 1.00 | 27.73 | C |
| ATOM | 7585 | O | LEU B 449 | 10.156 | 62.590 | 48.820 | 1.00 | 27.76 | O |
| ATOM | 7586 | N | PRO B 450 | 11.962 | 62.097 | 50.070 | 1.00 | 26.77 | N |
| ATOM | 7587 | CA | PRO B 450 | 12.933 | 62.812 | 49.220 | 1.00 | 26.60 | C |
| ATOM | 7589 | CB | PRO B 450 | 14.229 | 62.728 | 50.031 | 1.00 | 26.41 | C |
| ATOM | 7592 | CG | PRO B 450 | 14.065 | 61.540 | 50.847 | 1.00 | 26.30 | C |
| ATOM | 7595 | CD | PRO B 450 | 12.631 | 61.559 | 51.264 | 1.00 | 26.56 | C |
| ATOM | 7598 | C | PRO B 450 | 13.138 | 62.151 | 47.850 | 1.00 | 26.48 | C |
| ATOM | 7599 | O | PRO B 450 | 12.644 | 61.047 | 47.694 | 1.00 | 26.36 | O |
| ATOM | 7600 | N | PRO B 451 | 13.803 | 62.804 | 46.894 | 1.00 | 26.69 | N |
| ATOM | 7601 | CA | PRO B 451 | 13.980 | 62.256 | 45.533 | 1.00 | 26.91 | C |
| ATOM | 7603 | CB | PRO B 451 | 14.962 | 63.232 | 44.886 | 1.00 | 26.97 | C |
| ATOM | 7606 | CG | PRO B 451 | 14.749 | 64.553 | 45.638 | 1.00 | 26.63 | C |
| ATOM | 7609 | CD | PRO B 451 | 14.371 | 64.163 | 47.023 | 1.00 | 26.77 | C |
| ATOM | 7612 | C | PRO B 451 | 14.486 | 60.792 | 45.404 | 1.00 | 27.34 | C |
| ATOM | 7613 | O | PRO B 451 | 13.804 | 60.024 | 44.722 | 1.00 | 27.32 | O |
| ATOM | 7614 | N | LEU B 452 | 15.598 | 60.394 | 46.021 | 1.00 | 27.60 | N |
| ATOM | 7616 | CA | LEU B 452 | 16.093 | 59.030 | 45.808 | 1.00 | 28.03 | C |
| ATOM | 7618 | CB | LEU B 452 | 17.507 | 58.826 | 46.389 | 1.00 | 28.73 | C |
| ATOM | 7621 | CG | LEU B 452 | 18.165 | 57.425 | 46.196 | 1.00 | 31.15 | C |
| ATOM | 7623 | CD1 | LEU B 452 | 18.178 | 56.894 | 44.714 | 1.00 | 31.92 | C |
| ATOM | 7627 | CD2 | LEU B 452 | 19.606 | 57.399 | 46.767 | 1.00 | 32.38 | C |
| ATOM | 7631 | C | LEU B 452 | 15.121 | 57.952 | 46.325 | 1.00 | 27.55 | C |
| ATOM | 7632 | O | LEU B 452 | 15.012 | 56.874 | 45.734 | 1.00 | 28.06 | O |
| ATOM | 7633 | N | LEU B 453 | 14.399 | 58.237 | 47.401 | 1.00 | 27.00 | N |
| ATOM | 7635 | CA | LEU B 453 | 13.393 | 57.294 | 47.923 | 1.00 | 26.27 | C |
| ATOM | 7637 | CB | LEU B 453 | 13.138 | 57.540 | 49.407 | 1.00 | 25.68 | C |
| ATOM | 7640 | CG | LEU B 453 | 14.400 | 57.532 | 50.278 | 1.00 | 24.28 | C |
| ATOM | 7642 | CD1 | LEU B 453 | 14.057 | 57.776 | 51.757 | 1.00 | 23.69 | C |
| ATOM | 7646 | CD2 | LEU B 453 | 15.198 | 56.240 | 50.093 | 1.00 | 22.47 | C |
| ATOM | 7650 | C | LEU B 453 | 12.072 | 57.356 | 47.153 | 1.00 | 26.62 | C |

| ATOM | 7651 | O | LEU B 453 | 11.378 | 56.374 | 47.071 | 1.00 | 26.26 | O |
| ATOM | 7652 | N | SER B 454 | 11.719 | 58.510 | 46.593 | 1.00 | 27.23 | N |
| ATOM | 7654 | CA | SER B 454 | 10.516 | 58.629 | 45.771 | 1.00 | 27.56 | C |
| ATOM | 7656 | CB | SER B 454 | 10.341 | 60.051 | 45.256 | 1.00 | 27.17 | C |
| ATOM | 7659 | OG | SER B 454 | 9.176 | 60.137 | 44.461 | 1.00 | 26.82 | O |
| ATOM | 7661 | C | SER B 454 | 10.546 | 57.685 | 44.570 | 1.00 | 28.60 | C |
| ATOM | 7662 | O | SER B 454 | 9.548 | 57.055 | 44.247 | 1.00 | 28.67 | O |
| ATOM | 7663 | N | GLU B 455 | 11.684 | 57.578 | 43.900 | 1.00 | 29.39 | N |
| ATOM | 7665 | CA | GLU B 455 | 11.711 | 56.799 | 42.693 | 1.00 | 30.28 | C |
| ATOM | 7667 | CB | GLU B 455 | 12.880 | 57.192 | 41.804 | 1.00 | 30.98 | C |
| ATOM | 7670 | CG | GLU B 455 | 14.270 | 56.907 | 42.332 | 1.00 | 34.53 | C |
| ATOM | 7673 | CD | GLU B 455 | 15.352 | 57.392 | 41.361 | 1.00 | 39.06 | C |
| ATOM | 7674 | OE1 | GLU B 455 | 15.249 | 57.056 | 40.142 | 1.00 | 41.53 | O |
| ATOM | 7675 | OE2 | GLU B 455 | 16.300 | 58.099 | 41.809 | 1.00 | 40.65 | O |
| ATOM | 7676 | C | GLU B 455 | 11.659 | 55.306 | 42.947 | 1.00 | 30.47 | C |
| ATOM | 7677 | O | GLU B 455 | 11.347 | 54.555 | 42.035 | 1.00 | 30.99 | O |
| ATOM | 7678 | N | ILE B 456 | 11.917 | 54.868 | 44.176 | 1.00 | 30.71 | N |
| ATOM | 7680 | CA | ILE B 456 | 11.794 | 53.440 | 44.533 | 1.00 | 30.70 | C |
| ATOM | 7682 | CB | ILE B 456 | 12.909 | 53.005 | 45.536 | 1.00 | 30.90 | C |
| ATOM | 7684 | CG1 | ILE B 456 | 14.241 | 53.638 | 45.165 | 1.00 | 32.23 | C |
| ATOM | 7687 | CD1 | ILE B 456 | 15.194 | 53.630 | 46.299 | 1.00 | 33.86 | C |
| ATOM | 7691 | CG2 | ILE B 456 | 13.105 | 51.465 | 45.551 | 1.00 | 30.72 | C |
| ATOM | 7695 | C | ILE B 456 | 10.423 | 53.077 | 45.118 | 1.00 | 30.23 | C |
| ATOM | 7696 | O | ILE B 456 | 9.972 | 51.948 | 44.964 | 1.00 | 30.77 | O |
| ATOM | 7697 | N | TRP B 457 | 9.754 | 54.015 | 45.781 | 1.00 | 29.72 | N |
| ATOM | 7699 | CA | TRP B 457 | 8.610 | 53.668 | 46.626 | 1.00 | 29.22 | C |
| ATOM | 7701 | CB | TRP B 457 | 8.993 | 53.752 | 48.104 | 1.00 | 29.06 | C |
| ATOM | 7704 | CG | TRP B 457 | 10.023 | 52.799 | 48.544 | 1.00 | 26.61 | C |
| ATOM | 7705 | CD1 | TRP B 457 | 10.233 | 51.534 | 48.082 | 1.00 | 26.22 | C |
| ATOM | 7707 | NE1 | TRP B 457 | 11.267 | 50.950 | 48.771 | 1.00 | 25.62 | N |
| ATOM | 7709 | CE2 | TRP B 457 | 11.742 | 51.844 | 49.689 | 1.00 | 23.49 | C |
| ATOM | 7710 | CD2 | TRP B 457 | 10.969 | 53.014 | 49.575 | 1.00 | 23.71 | C |
| ATOM | 7711 | CE3 | TRP B 457 | 11.244 | 54.082 | 50.426 | 1.00 | 23.40 | C |
| ATOM | 7713 | CZ3 | TRP B 457 | 12.278 | 53.953 | 51.353 | 1.00 | 22.52 | C |
| ATOM | 7715 | CH2 | TRP B 457 | 13.016 | 52.780 | 51.435 | 1.00 | 23.80 | C |
| ATOM | 7717 | CZ2 | TRP B 457 | 12.765 | 51.711 | 50.606 | 1.00 | 23.37 | C |
| ATOM | 7719 | C | TRP B 457 | 7.360 | 54.498 | 46.430 | 1.00 | 29.43 | C |
| ATOM | 7720 | O | TRP B 457 | 6.335 | 54.165 | 46.996 | 1.00 | 30.24 | O |
| ATOM | 7721 | N | ASP B 458 | 7.414 | 55.582 | 45.680 | 1.00 | 29.55 | N |
| ATOM | 7723 | CA | ASP B 458 | 6.172 | 56.245 | 45.270 | 1.00 | 29.58 | C |
| ATOM | 7725 | CB | ASP B 458 | 6.383 | 57.748 | 44.993 | 1.00 | 29.62 | C |
| ATOM | 7728 | CG | ASP B 458 | 6.558 | 58.597 | 46.270 | 1.00 | 29.19 | C |
| ATOM | 7729 | OD1 | ASP B 458 | 5.853 | 58.388 | 47.276 | 1.00 | 27.26 | O |
| ATOM | 7730 | OD2 | ASP B 458 | 7.375 | 59.536 | 46.325 | 1.00 | 29.12 | O |
| ATOM | 7731 | C | ASP B 458 | 5.643 | 55.547 | 44.020 | 1.00 | 29.27 | C |
| ATOM | 7732 | O | ASP B 458 | 4.540 | 55.010 | 44.023 | 1.00 | 29.42 | O |
| ATOM | 7733 | O13 | 444 B 500 | 15.894 | 52.486 | 56.865 | 1.00 | 48.14 | O |
| ATOM | 7734 | S12 | 444 B 500 | 15.474 | 51.542 | 57.867 | 1.00 | 46.56 | S |

| ATOM | 7735 | O14 | 444 | B | 500 | 16.396 | 50.427 | 58.018 | 1.00 | 48.32 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 7736 | C01 | 444 | B | 500 | 15.582 | 52.491 | 59.353 | 1.00 | 48.77 | C |
| ATOM | 7737 | C02 | 444 | B | 500 | 15.889 | 51.818 | 60.575 | 1.00 | 50.65 | C |
| ATOM | 7739 | C03 | 444 | B | 500 | 15.958 | 52.565 | 61.760 | 1.00 | 51.57 | C |
| ATOM | 7741 | C04 | 444 | B | 500 | 15.718 | 53.958 | 61.711 | 1.00 | 52.37 | C |
| ATOM | 7743 | C05 | 444 | B | 500 | 15.406 | 54.615 | 60.487 | 1.00 | 51.11 | C |
| ATOM | 7745 | C06 | 444 | B | 500 | 15.333 | 53.878 | 59.291 | 1.00 | 49.40 | C |
| ATOM | 7747 | N15 | 444 | B | 500 | 13.727 | 51.138 | 57.775 | 1.00 | 36.30 | N |
| ATOM | 7748 | C16 | 444 | B | 500 | 13.081 | 50.396 | 58.957 | 1.00 | 33.50 | C |
| ATOM | 7751 | C19 | 444 | B | 500 | 12.351 | 49.166 | 58.482 | 1.00 | 31.89 | C |
| ATOM | 7752 | F22 | 444 | B | 500 | 12.007 | 48.424 | 59.531 | 1.00 | 31.80 | F |
| ATOM | 7753 | F21 | 444 | B | 500 | 13.079 | 48.342 | 57.710 | 1.00 | 31.53 | F |
| ATOM | 7754 | F20 | 444 | B | 500 | 11.241 | 49.447 | 57.804 | 1.00 | 32.02 | F |
| ATOM | 7755 | C23 | 444 | B | 500 | 12.784 | 52.170 | 57.243 | 1.00 | 29.65 | C |
| ATOM | 7756 | C24 | 444 | B | 500 | 12.771 | 52.362 | 55.844 | 1.00 | 27.35 | C |
| ATOM | 7758 | C25 | 444 | B | 500 | 11.945 | 53.318 | 55.224 | 1.00 | 24.31 | C |
| ATOM | 7760 | C28 | 444 | B | 500 | 11.911 | 52.985 | 58.037 | 1.00 | 25.39 | C |
| ATOM | 7762 | C27 | 444 | B | 500 | 11.090 | 53.944 | 57.426 | 1.00 | 23.40 | C |
| ATOM | 7764 | C26 | 444 | B | 500 | 11.076 | 54.137 | 56.001 | 1.00 | 22.41 | C |
| ATOM | 7765 | C33 | 444 | B | 500 | 10.204 | 55.176 | 55.214 | 1.00 | 21.07 | C |
| ATOM | 7766 | C34 | 444 | B | 500 | 8.816 | 55.450 | 55.874 | 1.00 | 21.30 | C |
| ATOM | 7767 | F36 | 444 | B | 500 | 8.015 | 56.167 | 55.037 | 1.00 | 20.33 | F |
| ATOM | 7768 | F37 | 444 | B | 500 | 8.113 | 54.341 | 56.184 | 1.00 | 21.82 | F |
| ATOM | 7769 | F35 | 444 | B | 500 | 8.986 | 56.096 | 57.053 | 1.00 | 21.46 | F |
| ATOM | 7770 | O42 | 444 | B | 500 | 9.950 | 54.781 | 53.835 | 1.00 | 19.04 | O |
| ATOM | 7772 | C38 | 444 | B | 500 | 10.934 | 56.551 | 55.213 | 1.00 | 19.74 | C |
| ATOM | 7773 | F39 | 444 | B | 500 | 11.397 | 56.954 | 56.422 | 1.00 | 18.29 | F |
| ATOM | 7774 | F40 | 444 | B | 500 | 12.019 | 56.555 | 54.437 | 1.00 | 18.70 | F |
| ATOM | 7775 | F41 | 444 | B | 500 | 10.199 | 57.555 | 54.733 | 1.00 | 20.76 | F |
| ATOM | 7776 | N | LEU | C | 220 | 68.407 | 95.876 | 84.954 | 1.00 | 20.46 | N |
| ATOM | 7778 | CA | LEU | C | 220 | 67.795 | 94.552 | 85.306 | 1.00 | 20.58 | C |
| ATOM | 7780 | CB | LEU | C | 220 | 67.642 | 93.651 | 84.059 | 1.00 | 20.70 | C |
| ATOM | 7783 | CG | LEU | C | 220 | 66.308 | 92.899 | 83.802 | 1.00 | 21.24 | C |
| ATOM | 7785 | CD1 | LEU | C | 220 | 66.541 | 91.475 | 83.287 | 1.00 | 21.11 | C |
| ATOM | 7789 | CD2 | LEU | C | 220 | 65.368 | 92.881 | 85.008 | 1.00 | 21.74 | C |
| ATOM | 7793 | C | LEU | C | 220 | 68.596 | 93.807 | 86.390 | 1.00 | 20.21 | C |
| ATOM | 7794 | O | LEU | C | 220 | 69.637 | 93.195 | 86.108 | 1.00 | 20.49 | O |
| ATOM | 7797 | N | THR | C | 221 | 68.083 | 93.847 | 87.621 | 1.00 | 19.34 | N |
| ATOM | 7799 | CA | THR | C | 221 | 68.701 | 93.172 | 88.756 | 1.00 | 18.30 | C |
| ATOM | 7801 | CB | THR | C | 221 | 68.088 | 93.684 | 90.106 | 1.00 | 18.36 | C |
| ATOM | 7803 | OG1 | THR | C | 221 | 66.687 | 93.393 | 90.171 | 1.00 | 17.31 | O |
| ATOM | 7805 | CG2 | THR | C | 221 | 68.162 | 95.212 | 90.228 | 1.00 | 17.98 | C |
| ATOM | 7809 | C | THR | C | 221 | 68.554 | 91.650 | 88.643 | 1.00 | 17.61 | C |
| ATOM | 7810 | O | THR | C | 221 | 67.801 | 91.155 | 87.820 | 1.00 | 17.01 | O |
| ATOM | 7811 | N | ALA | C | 222 | 69.283 | 90.924 | 89.484 | 1.00 | 17.25 | N |
| ATOM | 7813 | CA | ALA | C | 222 | 69.198 | 89.469 | 89.543 | 1.00 | 16.96 | C |
| ATOM | 7815 | CB | ALA | C | 222 | 70.278 | 88.938 | 90.408 | 1.00 | 16.75 | C |
| ATOM | 7819 | C | ALA | C | 222 | 67.836 | 89.005 | 90.069 | 1.00 | 16.95 | C |

| ATOM | 7820 | O | ALA C 222 | 67.353 | 87.956 | 89.647 | 1.00 | 16.95 | O |
| ATOM | 7821 | N | ALA C 223 | 67.249 | 89.795 | 90.985 | 1.00 | 16.64 | N |
| ATOM | 7823 | CA | ALA C 223 | 65.931 | 89.534 | 91.604 | 1.00 | 15.98 | C |
| ATOM | 7825 | CB | ALA C 223 | 65.719 | 90.403 | 92.862 | 1.00 | 15.97 | C |
| ATOM | 7829 | C | ALA C 223 | 64.775 | 89.752 | 90.689 | 1.00 | 15.40 | C |
| ATOM | 7830 | O | ALA C 223 | 63.752 | 89.128 | 90.860 | 1.00 | 15.83 | O |
| ATOM | 7831 | N | GLN C 224 | 64.902 | 90.685 | 89.762 | 1.00 | 15.28 | N |
| ATOM | 7833 | CA | GLN C 224 | 63.905 | 90.856 | 88.704 | 1.00 | 15.26 | C |
| ATOM | 7835 | CB | GLN C 224 | 64.125 | 92.170 | 87.974 | 1.00 | 15.26 | C |
| ATOM | 7838 | CG | GLN C 224 | 63.680 | 93.387 | 88.762 | 1.00 | 16.25 | C |
| ATOM | 7841 | CD | GLN C 224 | 63.977 | 94.673 | 88.018 | 1.00 | 18.24 | C |
| ATOM | 7842 | OE1 | GLN C 224 | 65.101 | 94.846 | 87.514 | 1.00 | 19.96 | O |
| ATOM | 7843 | NE2 | GLN C 224 | 62.972 | 95.569 | 87.910 | 1.00 | 16.95 | N |
| ATOM | 7846 | C | GLN C 224 | 64.006 | 89.698 | 87.722 | 1.00 | 15.13 | C |
| ATOM | 7847 | O | GLN C 224 | 62.996 | 89.093 | 87.358 | 1.00 | 14.53 | O |
| ATOM | 7848 | N | GLU C 225 | 65.238 | 89.374 | 87.332 | 1.00 | 15.32 | N |
| ATOM | 7850 | CA | GLU C 225 | 65.519 | 88.156 | 86.572 | 1.00 | 15.82 | C |
| ATOM | 7852 | CB | GLU C 225 | 67.020 | 88.011 | 86.331 | 1.00 | 16.20 | C |
| ATOM | 7855 | CG | GLU C 225 | 67.485 | 88.956 | 85.233 | 1.00 | 18.35 | C |
| ATOM | 7858 | CD | GLU C 225 | 68.906 | 88.731 | 84.764 | 1.00 | 20.57 | C |
| ATOM | 7859 | OE1 | GLU C 225 | 69.832 | 88.588 | 85.616 | 1.00 | 20.32 | O |
| ATOM | 7860 | OE2 | GLU C 225 | 69.079 | 88.724 | 83.521 | 1.00 | 22.87 | O |
| ATOM | 7861 | C | GLU C 225 | 64.962 | 86.894 | 87.235 | 1.00 | 15.54 | C |
| ATOM | 7862 | O | GLU C 225 | 64.339 | 86.086 | 86.569 | 1.00 | 15.47 | O |
| ATOM | 7863 | N | LEU C 226 | 65.135 | 86.751 | 88.546 | 1.00 | 15.44 | N |
| ATOM | 7865 | CA | LEU C 226 | 64.630 | 85.576 | 89.247 | 1.00 | 15.46 | C |
| ATOM | 7867 | CB | LEU C 226 | 65.038 | 85.553 | 90.720 | 1.00 | 15.43 | C |
| ATOM | 7870 | CG | LEU C 226 | 64.717 | 84.249 | 91.476 | 1.00 | 15.47 | C |
| ATOM | 7872 | CD1 | LEU C 226 | 65.124 | 83.034 | 90.639 | 1.00 | 16.08 | C |
| ATOM | 7876 | CD2 | LEU C 226 | 65.384 | 84.197 | 92.860 | 1.00 | 14.23 | C |
| ATOM | 7880 | C | LEU C 226 | 63.127 | 85.489 | 89.191 | 1.00 | 15.85 | C |
| ATOM | 7881 | O | LEU C 226 | 62.596 | 84.406 | 88.999 | 1.00 | 15.93 | O |
| ATOM | 7882 | N | MET C 227 | 62.429 | 86.607 | 89.369 | 1.00 | 15.98 | N |
| ATOM | 7884 | CA | MET C 227 | 60.986 | 86.516 | 89.433 | 1.00 | 16.23 | C |
| ATOM | 7886 | CB | MET C 227 | 60.334 | 87.695 | 90.154 | 1.00 | 16.93 | C |
| ATOM | 7889 | CG | MET C 227 | 60.180 | 88.921 | 89.351 | 1.00 | 19.81 | C |
| ATOM | 7892 | SD | MET C 227 | 58.651 | 89.062 | 88.383 | 1.00 | 21.98 | S |
| ATOM | 7893 | CE | MET C 227 | 58.925 | 90.815 | 88.003 | 1.00 | 19.64 | C |
| ATOM | 7897 | C | MET C 227 | 60.429 | 86.360 | 88.068 | 1.00 | 15.44 | C |
| ATOM | 7898 | O | MET C 227 | 59.376 | 85.790 | 87.945 | 1.00 | 15.35 | O |
| ATOM | 7899 | N | ILE C 228 | 61.125 | 86.861 | 87.050 | 1.00 | 14.99 | N |
| ATOM | 7901 | CA | ILE C 228 | 60.671 | 86.702 | 85.669 | 1.00 | 14.74 | C |
| ATOM | 7903 | CB | ILE C 228 | 61.512 | 87.586 | 84.698 | 1.00 | 15.10 | C |
| ATOM | 7905 | CG1 | ILE C 228 | 61.087 | 89.057 | 84.830 | 1.00 | 16.01 | C |
| ATOM | 7908 | CD1 | ILE C 228 | 62.068 | 90.078 | 84.206 | 1.00 | 15.97 | C |
| ATOM | 7912 | CG2 | ILE C 228 | 61.363 | 87.116 | 83.225 | 1.00 | 14.57 | C |
| ATOM | 7916 | C | ILE C 228 | 60.754 | 85.239 | 85.275 | 1.00 | 14.01 | C |
| ATOM | 7917 | O | ILE C 228 | 59.870 | 84.691 | 84.626 | 1.00 | 12.80 | O |

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ATOM   7918  N  GLN C 229    61.834 84.619 85.720 1.00 14.08      N
ATOM   7920 CA  GLN C 229    62.113 83.209 85.457 1.00 14.15      C
ATOM   7922 CB  GLN C 229    63.500 82.856 85.991 1.00 14.35      C
ATOM   7925 CG  GLN C 229    64.174 81.669 85.348 1.00 15.62      C
ATOM   7928 CD  GLN C 229    65.316 81.142 86.203 1.00 16.13      C
ATOM   7929 OE1 GLN C 229    65.423 79.947 86.395 1.00 16.72      O
ATOM   7930 NE2 GLN C 229    66.150 82.038 86.730 1.00 15.74      N
ATOM   7933  C  GLN C 229    61.057 82.331 86.094 1.00 13.31      C
ATOM   7934  O  GLN C 229    60.509 81.470 85.425 1.00 12.93      O
ATOM   7935  N  GLN C 230    60.768 82.592 87.370 1.00 12.70      N
ATOM   7937 CA  GLN C 230    59.681 81.946 88.090 1.00 12.92      C
ATOM   7939 CB  GLN C 230    59.694 82.346 89.572 1.00 12.73      C
ATOM   7942 CG  GLN C 230    60.986 81.999 90.285 1.00 12.90      C
ATOM   7945 CD  GLN C 230    60.801 81.507 91.697 1.00 13.18      C
ATOM   7946 OE1 GLN C 230    60.394 80.380 91.915 1.00 14.26      O
ATOM   7947 NE2 GLN C 230    61.136 82.336 92.659 1.00 14.08      N
ATOM   7950  C  GLN C 230    58.290 82.199 87.455 1.00 13.57      C
ATOM   7951  O  GLN C 230    57.493 81.298 87.404 1.00 13.61      O
ATOM   7952  N  LEU C 231    57.999 83.401 86.960 1.00 14.58      N
ATOM   7954 CA  LEU C 231    56.758 83.645 86.217 1.00 15.16      C
ATOM   7956 CB  LEU C 231    56.575 85.121 85.855 1.00 15.37      C
ATOM   7959 CG  LEU C 231    56.062 86.070 86.952 1.00 16.43      C
ATOM   7961 CD1 LEU C 231    55.947 87.467 86.338 1.00 16.51      C
ATOM   7965 CD2 LEU C 231    54.732 85.634 87.621 1.00 16.52      C
ATOM   7969  C  LEU C 231    56.678 82.823 84.948 1.00 15.35      C
ATOM   7970  O  LEU C 231    55.615 82.333 84.610 1.00 15.14      O
ATOM   7971  N  VAL C 232    57.795 82.666 84.251 1.00 15.94      N
ATOM   7973 CA  VAL C 232    57.812 81.880 83.020 1.00 16.58      C
ATOM   7975 CB  VAL C 232    59.152 82.087 82.231 1.00 16.85      C
ATOM   7977 CG1 VAL C 232    59.405 80.995 81.196 1.00 17.02      C
ATOM   7981 CG2 VAL C 232    59.161 83.455 81.558 1.00 17.16      C
ATOM   7985  C  VAL C 232    57.562 80.415 83.366 1.00 17.03      C
ATOM   7986  O  VAL C 232    56.726 79.770 82.762 1.00 17.47      O
ATOM   7987  N  ALA C 233    58.268 79.899 84.367 1.00 17.59      N
ATOM   7989 CA  ALA C 233    58.123 78.508 84.777 1.00 17.55      C
ATOM   7991 CB  ALA C 233    59.068 78.211 85.893 1.00 17.17      C
ATOM   7995  C  ALA C 233    56.686 78.203 85.202 1.00 18.36      C
ATOM   7996  O  ALA C 233    56.148 77.165 84.849 1.00 18.30      O
ATOM   7997  N  ALA C 234    56.081 79.114 85.964 1.00 19.19      N
ATOM   7999 CA  ALA C 234    54.691 79.022 86.381 1.00 19.97      C
ATOM   8001 CB  ALA C 234    54.277 80.311 87.092 1.00 20.01      C
ATOM   8005  C  ALA C 234    53.778 78.803 85.183 1.00 21.16      C
ATOM   8006  O  ALA C 234    52.928 77.918 85.203 1.00 21.00      O
ATOM   8007  N  GLN C 235    53.958 79.640 84.160 1.00 22.27      N
ATOM   8009 CA  GLN C 235    53.189 79.596 82.920 1.00 23.49      C
ATOM   8011 CB  GLN C 235    53.658 80.751 82.032 1.00 23.80      C
ATOM   8014 CG  GLN C 235    52.924 80.935 80.730 1.00 26.40      C
ATOM   8017 CD  GLN C 235    52.370 82.363 80.544 1.00 29.80      C
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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 8018 | OE1 | GLN | C 235 | 53.130 | 83.337 | 80.427 | 1.00 30.99 | O |
| ATOM | 8019 | NE2 | GLN | C 235 | 51.047 | 82.472 | 80.487 | 1.00 30.89 | N |
| ATOM | 8022 | C | GLN | C 235 | 53.307 | 78.225 | 82.200 | 1.00 24.09 | C |
| ATOM | 8023 | O | GLN | C 235 | 52.339 | 77.729 | 81.585 | 1.00 23.49 | O |
| ATOM | 8024 | N | LEU | C 236 | 54.482 | 77.611 | 82.306 | 1.00 25.22 | N |
| ATOM | 8026 | CA | LEU | C 236 | 54.736 | 76.290 | 81.724 | 1.00 26.63 | C |
| ATOM | 8028 | CB | LEU | C 236 | 56.226 | 75.973 | 81.743 | 1.00 26.79 | C |
| ATOM | 8031 | CG | LEU | C 236 | 56.787 | 75.400 | 80.451 | 1.00 28.16 | C |
| ATOM | 8033 | CD1 | LEU | C 236 | 56.763 | 76.459 | 79.351 | 1.00 29.45 | C |
| ATOM | 8037 | CD2 | LEU | C 236 | 58.202 | 74.896 | 80.685 | 1.00 29.39 | C |
| ATOM | 8041 | C | LEU | C 236 | 54.006 | 75.184 | 82.456 | 1.00 27.59 | C |
| ATOM | 8042 | O | LEU | C 236 | 53.410 | 74.312 | 81.836 | 1.00 27.49 | O |
| ATOM | 8043 | N | GLN | C 237 | 54.060 | 75.242 | 83.785 | 1.00 29.25 | N |
| ATOM | 8045 | CA | GLN | C 237 | 53.414 | 74.268 | 84.682 | 1.00 30.40 | C |
| ATOM | 8047 | CB | GLN | C 237 | 53.867 | 74.499 | 86.135 | 1.00 30.10 | C |
| ATOM | 8050 | CG | GLN | C 237 | 55.380 | 74.341 | 86.351 | 1.00 30.39 | C |
| ATOM | 8053 | CD | GLN | C 237 | 55.922 | 75.063 | 87.603 | 1.00 30.44 | C |
| ATOM | 8054 | OE1 | GLN | C 237 | 55.217 | 75.893 | 88.242 | 1.00 31.79 | O |
| ATOM | 8055 | NE2 | GLN | C 237 | 57.179 | 74.752 | 87.950 | 1.00 26.66 | N |
| ATOM | 8058 | C | GLN | C 237 | 51.879 | 74.315 | 84.603 | 1.00 31.76 | C |
| ATOM | 8059 | O | GLN | C 237 | 51.201 | 73.303 | 84.769 | 1.00 31.65 | O |
| ATOM | 8060 | N | CYS | C 238 | 51.337 | 75.494 | 84.350 | 1.00 33.85 | N |
| ATOM | 8062 | CA | CYS | C 238 | 49.903 | 75.652 | 84.231 | 1.00 36.00 | C |
| ATOM | 8064 | CB | CYS | C 238 | 49.534 | 77.116 | 84.461 | 1.00 36.02 | C |
| ATOM | 8067 | SG | CYS | C 238 | 49.621 | 77.474 | 86.236 | 1.00 37.59 | S |
| ATOM | 8068 | C | CYS | C 238 | 49.386 | 75.105 | 82.891 | 1.00 37.79 | C |
| ATOM | 8069 | O | CYS | C 238 | 48.207 | 74.813 | 82.764 | 1.00 37.55 | O |
| ATOM | 8070 | N | ASN | C 239 | 50.285 | 74.946 | 81.921 | 1.00 40.34 | N |
| ATOM | 8072 | CA | ASN | C 239 | 50.019 | 74.205 | 80.698 | 1.00 42.63 | C |
| ATOM | 8074 | CB | ASN | C 239 | 51.118 | 74.510 | 79.681 | 1.00 42.83 | C |
| ATOM | 8077 | CG | ASN | C 239 | 50.786 | 74.006 | 78.315 | 1.00 44.12 | C |
| ATOM | 8078 | OD1 | ASN | C 239 | 49.798 | 74.422 | 77.728 | 1.00 46.84 | O |
| ATOM | 8079 | ND2 | ASN | C 239 | 51.598 | 73.085 | 77.798 | 1.00 46.09 | N |
| ATOM | 8082 | C | ASN | C 239 | 49.939 | 72.691 | 80.963 | 1.00 44.86 | C |
| ATOM | 8083 | O | ASN | C 239 | 50.957 | 71.989 | 80.997 | 1.00 45.24 | O |
| ATOM | 8084 | N | LYS | C 240 | 48.732 | 72.182 | 81.187 | 1.00 47.39 | N |
| ATOM | 8086 | CA | LYS | C 240 | 48.550 | 70.748 | 81.424 | 1.00 49.15 | C |
| ATOM | 8088 | CB | LYS | C 240 | 47.781 | 70.503 | 82.729 | 1.00 49.57 | C |
| ATOM | 8091 | CG | LYS | C 240 | 48.507 | 70.929 | 84.012 | 1.00 50.75 | C |
| ATOM | 8094 | CD | LYS | C 240 | 47.948 | 70.193 | 85.265 | 1.00 52.28 | C |
| ATOM | 8097 | CE | LYS | C 240 | 47.419 | 71.177 | 86.342 | 1.00 53.52 | C |
| ATOM | 8100 | NZ | LYS | C 240 | 47.743 | 70.775 | 87.756 | 1.00 53.89 | N |
| ATOM | 8104 | C | LYS | C 240 | 47.804 | 70.106 | 80.254 | 1.00 50.30 | C |
| ATOM | 8105 | O | LYS | C 240 | 47.424 | 68.938 | 80.323 | 1.00 50.42 | O |
| ATOM | 8106 | N | ARG | C 241 | 47.601 | 70.873 | 79.184 | 1.00 51.69 | N |
| ATOM | 8108 | CA | ARG | C 241 | 46.918 | 70.388 | 77.987 | 1.00 52.70 | C |
| ATOM | 8110 | CB | ARG | C 241 | 46.974 | 71.449 | 76.886 | 1.00 52.54 | C |
| ATOM | 8113 | CG | ARG | C 241 | 46.146 | 72.674 | 77.168 | 1.00 51.29 | C |

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ATOM  8116 CD  ARG C 241   46.528 73.889 76.361 1.00 49.48      C
ATOM  8119 NE  ARG C 241   45.874 75.080 76.905 1.00 48.48      N
ATOM  8121 CZ  ARG C 241   45.827 76.268 76.306 1.00 47.84      C
ATOM  8122 NH1 ARG C 241   46.379 76.469 75.115 1.00 47.82      N
ATOM  8125 NH2 ARG C 241   45.207 77.269 76.909 1.00 48.35      N
ATOM  8128 C   ARG C 241   47.557 69.102 77.465 1.00 54.27      C
ATOM  8129 O   ARG C 241   46.900 68.060 77.338 1.00 54.32      O
ATOM  8130 N   SER C 242   48.850 69.180 77.173 1.00 55.92      N
ATOM  8132 CA  SER C 242   49.563 68.050 76.591 1.00 57.26      C
ATOM  8134 CB  SER C 242   51.019 68.420 76.283 1.00 57.29      C
ATOM  8137 OG  SER C 242   51.473 69.444 77.157 1.00 58.10      O
ATOM  8139 C   SER C 242   49.477 66.799 77.479 1.00 58.42      C
ATOM  8140 O   SER C 242   49.664 65.676 76.975 1.00 59.11      O
ATOM  8141 N   PHE C 243   49.206 66.980 78.781 1.00 59.46      N
ATOM  8143 CA  PHE C 243   48.865 65.854 79.686 1.00 60.31      C
ATOM  8145 CB  PHE C 243   50.077 65.405 80.541 1.00 60.66      C
ATOM  8148 CG  PHE C 243   50.153 66.059 81.920 1.00 62.56      C
ATOM  8149 CD1 PHE C 243   50.147 65.278 83.098 1.00 64.33      C
ATOM  8151 CE1 PHE C 243   50.223 65.895 84.379 1.00 64.98      C
ATOM  8153 CZ  PHE C 243   50.311 67.300 84.473 1.00 64.86      C
ATOM  8155 CE2 PHE C 243   50.329 68.078 83.298 1.00 64.42      C
ATOM  8157 CD2 PHE C 243   50.251 67.455 82.038 1.00 63.80      C
ATOM  8159 C   PHE C 243   47.669 66.186 80.583 1.00 60.21      C
ATOM  8160 O   PHE C 243   46.533 65.826 80.274 1.00 60.43      O
ATOM  8161 N   LYS C 248   39.626 65.075 76.301 1.00 41.86      N
ATOM  8163 CA  LYS C 248   38.541 65.296 77.242 1.00 42.05      C
ATOM  8165 CB  LYS C 248   38.891 66.465 78.181 1.00 42.47      C
ATOM  8168 CG  LYS C 248   40.049 66.219 79.139 1.00 44.16      C
ATOM  8171 CD  LYS C 248   39.649 65.197 80.180 1.00 46.13      C
ATOM  8174 CE  LYS C 248   40.526 65.235 81.417 1.00 46.95      C
ATOM  8177 NZ  LYS C 248   40.322 63.973 82.231 1.00 47.61      N
ATOM  8181 C   LYS C 248   37.239 65.645 76.521 1.00 41.37      C
ATOM  8182 O   LYS C 248   36.147 65.300 76.996 1.00 41.73      O
ATOM  8183 N   VAL C 249   37.379 66.289 75.357 1.00 40.21      N
ATOM  8185 CA  VAL C 249   36.464 67.352 74.905 1.00 39.12      C
ATOM  8187 CB  VAL C 249   37.311 68.530 74.334 1.00 39.26      C
ATOM  8189 CG1 VAL C 249   36.471 69.495 73.527 1.00 39.31      C
ATOM  8193 CG2 VAL C 249   38.051 69.262 75.467 1.00 39.63      C
ATOM  8197 C   VAL C 249   35.472 66.941 73.834 1.00 37.78      C
ATOM  8198 O   VAL C 249   35.825 66.168 72.963 1.00 37.84      O
ATOM  8199 N   THR C 250   34.256 67.496 73.880 1.00 36.34      N
ATOM  8201 CA  THR C 250   33.251 67.297 72.826 1.00 35.50      C
ATOM  8203 CB  THR C 250   32.101 68.355 72.890 1.00 35.49      C
ATOM  8205 OG1 THR C 250   31.341 68.188 74.086 1.00 35.88      O
ATOM  8207 CG2 THR C 250   31.040 68.134 71.808 1.00 34.99      C
ATOM  8211 C   THR C 250   33.918 67.351 71.458 1.00 34.68      C
ATOM  8212 O   THR C 250   34.625 68.304 71.143 1.00 34.47      O
ATOM  8213 N   PRO C 251   33.698 66.327 70.643 1.00 33.91      N
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| ATOM | 8214 | CA  | PRO C 251 | 34.356 66.253 69.339 1.00 33.43 | C |
| ATOM | 8216 | CB  | PRO C 251 | 33.774 64.977 68.720 1.00 33.40 | C |
| ATOM | 8219 | CG  | PRO C 251 | 33.089 64.256 69.797 1.00 33.58 | C |
| ATOM | 8222 | CD  | PRO C 251 | 32.787 65.193 70.878 1.00 33.69 | C |
| ATOM | 8225 | C   | PRO C 251 | 34.011 67.452 68.462 1.00 32.89 | C |
| ATOM | 8226 | O   | PRO C 251 | 32.862 67.908 68.471 1.00 32.37 | O |
| ATOM | 8227 | N   | TRP C 252 | 34.986 67.957 67.718 1.00 32.56 | N |
| ATOM | 8229 | CA  | TRP C 252 | 34.679 68.934 66.686 1.00 32.35 | C |
| ATOM | 8231 | CB  | TRP C 252 | 35.944 69.601 66.140 1.00 32.11 | C |
| ATOM | 8234 | CG  | TRP C 252 | 35.644 70.693 65.138 1.00 29.88 | C |
| ATOM | 8235 | CD1 | TRP C 252 | 35.682 70.590 63.784 1.00 28.00 | C |
| ATOM | 8237 | NE1 | TRP C 252 | 35.329 71.785 63.212 1.00 27.26 | N |
| ATOM | 8239 | CE2 | TRP C 252 | 35.055 72.690 64.201 1.00 26.41 | C |
| ATOM | 8240 | CD2 | TRP C 252 | 35.243 72.035 65.427 1.00 27.25 | C |
| ATOM | 8241 | CE3 | TRP C 252 | 35.012 72.751 66.608 1.00 27.05 | C |
| ATOM | 8243 | CZ3 | TRP C 252 | 34.615 74.085 66.525 1.00 26.17 | C |
| ATOM | 8245 | CH2 | TRP C 252 | 34.447 74.706 65.284 1.00 25.83 | C |
| ATOM | 8247 | CZ2 | TRP C 252 | 34.661 74.028 64.116 1.00 25.44 | C |
| ATOM | 8249 | C   | TRP C 252 | 33.952 68.186 65.570 1.00 32.80 | C |
| ATOM | 8250 | O   | TRP C 252 | 34.509 67.232 65.025 1.00 32.69 | O |
| ATOM | 8251 | N   | PRO C 253 | 32.713 68.574 65.253 1.00 33.34 | N |
| ATOM | 8252 | CA  | PRO C 253 | 31.984 67.939 64.147 1.00 33.88 | C |
| ATOM | 8254 | CB  | PRO C 253 | 30.613 68.655 64.147 1.00 33.74 | C |
| ATOM | 8257 | CG  | PRO C 253 | 30.713 69.791 65.065 1.00 33.48 | C |
| ATOM | 8260 | CD  | PRO C 253 | 31.897 69.594 65.939 1.00 33.29 | C |
| ATOM | 8263 | C   | PRO C 253 | 32.697 68.001 62.763 1.00 34.60 | C |
| ATOM | 8264 | O   | PRO C 253 | 32.411 68.878 61.939 1.00 34.89 | O |
| ATOM | 8265 | N   | ALA C 254 | 33.605 67.045 62.532 1.00 35.09 | N |
| ATOM | 8267 | CA  | ALA C 254 | 34.331 66.899 61.271 1.00 35.12 | C |
| ATOM | 8269 | CB  | ALA C 254 | 35.663 66.175 61.496 1.00 35.06 | C |
| ATOM | 8273 | C   | ALA C 254 | 33.462 66.113 60.299 1.00 34.95 | C |
| ATOM | 8274 | O   | ALA C 254 | 32.531 66.666 59.720 1.00 34.81 | O |
| ATOM | 8275 | N   | GLN C 259 | 26.034 75.361 59.136 1.00 34.42 | N |
| ATOM | 8277 | CA  | GLN C 259 | 24.632 75.823 59.219 1.00 34.77 | C |
| ATOM | 8279 | CB  | GLN C 259 | 24.152 76.445 57.876 1.00 35.11 | C |
| ATOM | 8282 | CG  | GLN C 259 | 23.924 78.004 57.935 1.00 36.15 | C |
| ATOM | 8285 | CD  | GLN C 259 | 22.642 78.488 57.206 1.00 37.82 | C |
| ATOM | 8286 | OE1 | GLN C 259 | 22.260 79.675 57.322 1.00 39.20 | O |
| ATOM | 8287 | NE2 | GLN C 259 | 21.988 77.583 56.462 1.00 35.43 | N |
| ATOM | 8290 | C   | GLN C 259 | 23.602 74.780 59.740 1.00 34.03 | C |
| ATOM | 8291 | O   | GLN C 259 | 22.420 75.113 59.872 1.00 33.75 | O |
| ATOM | 8292 | N   | SER C 260 | 24.036 73.549 60.044 1.00 33.33 | N |
| ATOM | 8294 | CA  | SER C 260 | 23.219 72.625 60.853 1.00 32.74 | C |
| ATOM | 8296 | CB  | SER C 260 | 23.827 71.210 60.892 1.00 32.55 | C |
| ATOM | 8299 | OG  | SER C 260 | 23.138 70.349 61.793 1.00 31.99 | O |
| ATOM | 8301 | C   | SER C 260 | 23.115 73.227 62.262 1.00 32.60 | C |
| ATOM | 8302 | O   | SER C 260 | 24.105 73.762 62.787 1.00 32.47 | O |
| ATOM | 8303 | N   | ARG C 261 | 21.920 73.170 62.858 1.00 32.19 | N |

| ATOM | 8305 | CA | ARG C 261 | 21.679 | 73.830 | 64.144 | 1.00 | 31.83 | C |
|------|------|----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 8307 | CB | ARG C 261 | 20.199 | 74.230 | 64.335 | 1.00 | 31.96 | C |
| ATOM | 8310 | CG | ARG C 261 | 19.869 | 75.702 | 63.931 | 1.00 | 33.08 | C |
| ATOM | 8313 | CD | ARG C 261 | 18.946 | 75.860 | 62.706 | 1.00 | 34.91 | C |
| ATOM | 8316 | NE | ARG C 261 | 17.545 | 75.543 | 63.025 | 1.00 | 36.69 | N |
| ATOM | 8318 | CZ | ARG C 261 | 16.934 | 74.357 | 62.826 | 1.00 | 37.43 | C |
| ATOM | 8319 | NH1 | ARG C 261 | 17.575 | 73.322 | 62.288 | 1.00 | 37.47 | N |
| ATOM | 8322 | NH2 | ARG C 261 | 15.655 | 74.204 | 63.171 | 1.00 | 37.56 | N |
| ATOM | 8325 | C | ARG C 261 | 22.194 | 72.974 | 65.295 | 1.00 | 31.11 | C |
| ATOM | 8326 | O | ARG C 261 | 22.808 | 73.506 | 66.213 | 1.00 | 31.05 | O |
| ATOM | 8327 | N | ASP C 262 | 21.975 | 71.661 | 65.234 | 1.00 | 30.40 | N |
| ATOM | 8329 | CA | ASP C 262 | 22.572 | 70.736 | 66.206 | 1.00 | 29.93 | C |
| ATOM | 8331 | CB | ASP C 262 | 22.117 | 69.305 | 65.951 | 1.00 | 30.03 | C |
| ATOM | 8334 | CG | ASP C 262 | 20.616 | 69.111 | 66.142 | 1.00 | 30.19 | C |
| ATOM | 8335 | OD1 | ASP C 262 | 19.944 | 68.672 | 65.187 | 1.00 | 30.32 | O |
| ATOM | 8336 | OD2 | ASP C 262 | 20.015 | 69.349 | 67.205 | 1.00 | 31.11 | O |
| ATOM | 8337 | C | ASP C 262 | 24.108 | 70.782 | 66.164 | 1.00 | 29.57 | C |
| ATOM | 8338 | O | ASP C 262 | 24.756 | 70.638 | 67.205 | 1.00 | 29.64 | O |
| ATOM | 8339 | N | ALA C 263 | 24.679 | 70.986 | 64.968 | 1.00 | 29.00 | N |
| ATOM | 8341 | CA | ALA C 263 | 26.142 | 71.119 | 64.782 | 1.00 | 28.34 | C |
| ATOM | 8343 | CB | ALA C 263 | 26.521 | 70.866 | 63.329 | 1.00 | 28.10 | C |
| ATOM | 8347 | C | ALA C 263 | 26.697 | 72.473 | 65.227 | 1.00 | 28.05 | C |
| ATOM | 8348 | O | ALA C 263 | 27.877 | 72.586 | 65.584 | 1.00 | 28.04 | O |
| ATOM | 8349 | N | ARG C 264 | 25.850 | 73.501 | 65.169 | 1.00 | 27.68 | N |
| ATOM | 8351 | CA | ARG C 264 | 26.188 | 74.837 | 65.655 | 1.00 | 27.18 | C |
| ATOM | 8353 | CB | ARG C 264 | 25.058 | 75.834 | 65.322 | 1.00 | 27.74 | C |
| ATOM | 8356 | CG | ARG C 264 | 25.486 | 77.267 | 64.952 | 1.00 | 30.13 | C |
| ATOM | 8359 | CD | ARG C 264 | 24.575 | 77.961 | 63.902 | 1.00 | 33.50 | C |
| ATOM | 8362 | NE | ARG C 264 | 25.125 | 77.859 | 62.540 | 1.00 | 37.36 | N |
| ATOM | 8364 | CZ | ARG C 264 | 26.043 | 78.688 | 61.989 | 1.00 | 40.28 | C |
| ATOM | 8365 | NH1 | ARG C 264 | 26.528 | 79.731 | 62.662 | 1.00 | 41.58 | N |
| ATOM | 8368 | NH2 | ARG C 264 | 26.482 | 78.479 | 60.744 | 1.00 | 41.03 | N |
| ATOM | 8371 | C | ARG C 264 | 26.391 | 74.703 | 67.159 | 1.00 | 25.99 | C |
| ATOM | 8372 | O | ARG C 264 | 27.453 | 75.008 | 67.647 | 1.00 | 25.58 | O |
| ATOM | 8373 | N | GLN C 265 | 25.374 | 74.190 | 67.854 | 1.00 | 24.98 | N |
| ATOM | 8375 | CA | GLN C 265 | 25.361 | 73.998 | 69.305 | 1.00 | 24.58 | C |
| ATOM | 8377 | CB | GLN C 265 | 24.019 | 73.382 | 69.729 | 1.00 | 25.17 | C |
| ATOM | 8380 | CG | GLN C 265 | 23.785 | 73.104 | 71.245 | 1.00 | 27.23 | C |
| ATOM | 8383 | CD | GLN C 265 | 22.673 | 72.002 | 71.480 | 1.00 | 31.77 | C |
| ATOM | 8384 | OE1 | GLN C 265 | 21.664 | 71.909 | 70.732 | 1.00 | 31.49 | O |
| ATOM | 8385 | NE2 | GLN C 265 | 22.879 | 71.169 | 72.513 | 1.00 | 34.62 | N |
| ATOM | 8388 | C | GLN C 265 | 26.488 | 73.106 | 69.779 | 1.00 | 23.29 | C |
| ATOM | 8389 | O | GLN C 265 | 27.023 | 73.314 | 70.868 | 1.00 | 22.92 | O |
| ATOM | 8390 | N | GLN C 266 | 26.847 | 72.114 | 68.972 | 1.00 | 21.85 | N |
| ATOM | 8392 | CA | GLN C 266 | 27.948 | 71.227 | 69.327 | 1.00 | 20.84 | C |
| ATOM | 8394 | CB | GLN C 266 | 27.961 | 69.976 | 68.460 | 1.00 | 21.06 | C |
| ATOM | 8397 | CG | GLN C 266 | 29.137 | 69.048 | 68.790 | 1.00 | 21.74 | C |
| ATOM | 8400 | CD | GLN C 266 | 29.085 | 67.730 | 68.055 | 1.00 | 22.54 | C |

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ATOM   8401  OE1 GLN C 266    28.024 67.307 67.577 1.00 22.20      O
ATOM   8402  NE2 GLN C 266    30.238 67.075 67.953 1.00 22.63      N
ATOM   8405  C   GLN C 266    29.299 71.917 69.233 1.00 19.52      C
ATOM   8406  O   GLN C 266    30.167 71.688 70.057 1.00 19.32      O
ATOM   8407  N   ARG C 267    29.485 72.749 68.221 1.00 18.43      N
ATOM   8409  CA  ARG C 267    30.707 73.551 68.113 1.00 17.70      C
ATOM   8411  CB  ARG C 267    30.783 74.267 66.771 1.00 18.24      C
ATOM   8414  CG  ARG C 267    31.132 73.348 65.639 1.00 20.40      C
ATOM   8417  CD  ARG C 267    31.076 74.008 64.290 1.00 23.57      C
ATOM   8420  NE  ARG C 267    31.321 73.044 63.220 1.00 25.63      N
ATOM   8422  CZ  ARG C 267    30.546 72.872 62.166 1.00 27.98      C
ATOM   8423  NH1 ARG C 267    29.445 73.600 62.004 1.00 28.84  :   N
ATOM   8426  NH2 ARG C 267    30.875 71.960 61.264 1.00 29.05      N
ATOM   8429  C   ARG C 267    30.840 74.581 69.204 1.00 15.71      C
ATOM   8430  O   ARG C 267    31.925 74.870 69.603 1.00 14.98      O
ATOM   8431  N   PHE C 268    29.729 75.146 69.652 1.00 14.61      N
ATOM   8433  CA  PHE C 268    29.735 76.136 70.714 1.00 14.06      C
ATOM   8435  CB  PHE C 268    28.362 76.820 70.846 1.00 13.77      C
ATOM   8438  CG  PHE C 268    28.190 77.607 72.113 1.00 13.29      C
ATOM   8439  CD1 PHE C 268    28.887 78.764 72.316 1.00 14.01      C
ATOM   8441  CE1 PHE C 268    28.730 79.493 73.497 1.00 15.81      C
ATOM   8443  CZ  PHE C 268    27.866 79.050 74.481 1.00 15.75      C
ATOM   8445  CE2 PHE C 268    27.157 77.891 74.275 1.00 15.55      C
ATOM   8447  CD2 PHE C 268    27.322 77.179 73.099 1.00 14.11      C
ATOM   8449  C   PHE C 268    30.165 75.434 72.001 1.00 13.72      C
ATOM   8450  O   PHE C 268    31.000 75.938 72.732 1.00 12.92      O
ATOM   8451  N   ALA C 269    29.621 74.248 72.256 1.00 13.79      N
ATOM   8453  CA  ALA C 269    30.017 73.470 73.435 1.00 13.65      C
ATOM   8455  CB  ALA C 269    29.192 72.179 73.536 1.00 13.09      C
ATOM   8459  C   ALA C 269    31.536 73.186 73.394 1.00 13.63      C
ATOM   8460  O   ALA C 269    32.242 73.449 74.361 1.00 12.70      O
ATOM   8461  N   HIS C 270    32.021 72.690 72.252 1.00 14.13      N
ATOM   8463  CA  HIS C 270    33.442 72.440 72.035 1.00 14.56      C
ATOM   8465  CB  HIS C 270    33.746 72.133 70.545 1.00 14.66      C
ATOM   8468  CG  HIS C 270    35.204 71.893 70.277 1.00 16.74      C
ATOM   8469  ND1 HIS C 270    35.857 70.744 70.672 1.00 18.73      N
ATOM   8471  CE1 HIS C 270    37.138 70.828 70.359 1.00 18.04      C
ATOM   8473  NE2 HIS C 270    37.340 71.987 69.764 1.00 18.65      N
ATOM   8475  CD2 HIS C 270    36.150 72.677 69.707 1.00 18.49      C
ATOM   8477  C   HIS C 270    34.244 73.635 72.510 1.00 14.41      C
ATOM   8478  O   HIS C 270    35.193 73.499 73.258 1.00 13.94      O
ATOM   8479  N   PHE C 271    33.821 74.814 72.077 1.00 15.11      N
ATOM   8481  CA  PHE C 271    34.479 76.089 72.388 1.00 15.73      C
ATOM   8483  CB  PHE C 271    33.773 77.198 71.613 1.00 15.88      C
ATOM   8486  CG  PHE C 271    34.476 77.594 70.389 1.00 18.73      C
ATOM   8487  CD1 PHE C 271    34.874 76.651 69.473 1.00 20.86      C
ATOM   8489  CE1 PHE C 271    35.561 77.022 68.312 1.00 22.61      C
ATOM   8491  CZ  PHE C 271    35.873 78.333 68.072 1.00 23.46      C
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| ATOM | 8493 | CE2 | PHE | C 271 | 35.490 | 79.302 | 68.989 | 1.00 | 25.08 | C |
|------|------|-----|-----|-------|--------|--------|--------|------|-------|---|
| ATOM | 8495 | CD2 | PHE | C 271 | 34.790 | 78.926 | 70.156 | 1.00 | 23.86 | C |
| ATOM | 8497 | C   | PHE | C 271 | 34.420 | 76.429 | 73.867 | 1.00 | 15.43 | C |
| ATOM | 8498 | O   | PHE | C 271 | 35.301 | 76.990 | 74.447 | 1.00 | 15.27 | O |
| ATOM | 8499 | N   | THR | C 272 | 33.291 | 76.111 | 74.431 | 1.00 | 16.05 | N |
| ATOM | 8501 | CA  | THR | C 272 | 32.954 | 76.322 | 75.815 | 1.00 | 16.18 | C |
| ATOM | 8503 | CB  | THR | C 272 | 31.435 | 75.945 | 75.906 | 1.00 | 16.24 | C |
| ATOM | 8505 | OG1 | THR | C 272 | 30.662 | 77.093 | 76.260 | 1.00 | 18.44 | O |
| ATOM | 8507 | CG2 | THR | C 272 | 31.115 | 74.947 | 76.905 | 1.00 | 15.83 | C |
| ATOM | 8511 | C   | THR | C 272 | 33.909 | 75.508 | 76.710 | 1.00 | 16.06 | C |
| ATOM | 8512 | O   | THR | C 272 | 34.369 | 75.986 | 77.742 | 1.00 | 16.06 | O |
| ATOM | 8513 | N   | GLU | C 273 | 34.270 | 74.312 | 76.256 | 1.00 | 16.17 | N |
| ATOM | 8515 | CA  | GLU | C 273 | 35.168 | 73.407 | 76.990 | 1.00 | 16.01 | C |
| ATOM | 8517 | CB  | GLU | C 273 | 34.916 | 71.944 | 76.588 | 1.00 | 15.86 | C |
| ATOM | 8520 | CG  | GLU | C 273 | 33.509 | 71.506 | 76.950 | 1.00 | 17.12 | C |
| ATOM | 8523 | CD  | GLU | C 273 | 33.053 | 70.237 | 76.278 | 1.00 | 18.83 | C |
| ATOM | 8524 | OE1 | GLU | C 273 | 31.896 | 70.177 | 75.770 | 1.00 | 17.58 | O |
| ATOM | 8525 | OE2 | GLU | C 273 | 33.854 | 69.289 | 76.311 | 1.00 | 23.37 | O |
| ATOM | 8526 | C   | GLU | C 273 | 36.627 | 73.783 | 76.788 | 1.00 | 15.47 | C |
| ATOM | 8527 | O   | GLU | C 273 | 37.434 | 73.573 | 77.662 | 1.00 | 15.17 | O |
| ATOM | 8528 | N   | LEU | C 274 | 36.971 | 74.355 | 75.650 | 1.00 | 15.35 | N |
| ATOM | 8530 | CA  | LEU | C 274 | 38.303 | 74.947 | 75.535 | 1.00 | 15.67 | C |
| ATOM | 8532 | CB  | LEU | C 274 | 38.675 | 75.292 | 74.069 | 1.00 | 15.77 | C |
| ATOM | 8535 | CG  | LEU | C 274 | 38.623 | 74.150 | 73.040 | 1.00 | 16.76 | C |
| ATOM | 8537 | CD1 | LEU | C 274 | 39.106 | 74.592 | 71.689 | 1.00 | 15.92 | C |
| ATOM | 8541 | CD2 | LEU | C 274 | 39.413 | 72.936 | 73.500 | 1.00 | 17.77 | C |
| ATOM | 8545 | C   | LEU | C 274 | 38.445 | 76.167 | 76.486 | 1.00 | 15.04 | C |
| ATOM | 8546 | O   | LEU | C 274 | 39.422 | 76.250 | 77.215 | 1.00 | 15.58 | O |
| ATOM | 8547 | N   | ALA | C 275 | 37.479 | 77.076 | 76.517 | 1.00 | 14.12 | N |
| ATOM | 8549 | CA  | ALA | C 275 | 37.538 | 78.172 | 77.473 | 1.00 | 14.24 | C |
| ATOM | 8551 | CB  | ALA | C 275 | 36.372 | 79.116 | 77.314 | 1.00 | 14.24 | C |
| ATOM | 8555 | C   | ALA | C 275 | 37.621 | 77.680 | 78.916 | 1.00 | 14.53 | C |
| ATOM | 8556 | O   | ALA | C 275 | 38.372 | 78.231 | 79.725 | 1.00 | 14.45 | O |
| ATOM | 8557 | N   | ILE | C 276 | 36.878 | 76.640 | 79.258 | 1.00 | 14.52 | N |
| ATOM | 8559 | CA  | ILE | C 276 | 37.017 | 76.125 | 80.613 | 1.00 | 14.89 | C |
| ATOM | 8561 | CB  | ILE | C 276 | 35.952 | 75.057 | 80.921 | 1.00 | 14.62 | C |
| ATOM | 8563 | CG1 | ILE | C 276 | 34.659 | 75.745 | 81.324 | 1.00 | 14.39 | C |
| ATOM | 8566 | CD1 | ILE | C 276 | 33.486 | 74.802 | 81.357 | 1.00 | 14.79 | C |
| ATOM | 8570 | CG2 | ILE | C 276 | 36.378 | 74.145 | 82.042 | 1.00 | 15.05 | C |
| ATOM | 8574 | C   | ILE | C 276 | 38.472 | 75.648 | 80.894 | 1.00 | 15.15 | C |
| ATOM | 8575 | O   | ILE | C 276 | 39.021 | 75.983 | 81.938 | 1.00 | 15.88 | O |
| ATOM | 8576 | N   | ILE | C 277 | 39.105 | 74.917 | 79.986 | 1.00 | 14.95 | N |
| ATOM | 8578 | CA  | ILE | C 277 | 40.508 | 74.571 | 80.181 | 1.00 | 15.24 | C |
| ATOM | 8580 | CB  | ILE | C 277 | 41.068 | 73.786 | 78.980 | 1.00 | 15.29 | C |
| ATOM | 8582 | CG1 | ILE | C 277 | 40.395 | 72.418 | 78.849 | 1.00 | 14.81 | C |
| ATOM | 8585 | CD1 | ILE | C 277 | 40.549 | 71.790 | 77.473 | 1.00 | 14.39 | C |
| ATOM | 8589 | CG2 | ILE | C 277 | 42.569 | 73.589 | 79.115 | 1.00 | 15.22 | C |
| ATOM | 8593 | C   | ILE | C 277 | 41.365 | 75.835 | 80.453 | 1.00 | 16.14 | C |

ATOM 8594 O   ILE C 277   42.272 75.817 81.306 1.00 15.48      O
ATOM 8595 N   SER C 278   41.081 76.937 79.763 1.00 17.05      N
ATOM 8597 CA  SER C 278   41.862 78.159 79.982 1.00 18.26      C
ATOM 8599 CB  SER C 278   41.579 79.195 78.913 1.00 18.25      C
ATOM 8602 OG  SER C 278   42.183 78.803 77.710 1.00 21.13      O
ATOM 8604 C   SER C 278   41.606 78.794 81.328 1.00 18.55      C
ATOM 8605 O   SER C 278   42.535 79.250 81.976 1.00 18.73      O
ATOM 8606 N   VAL C 279   40.337 78.854 81.717 1.00 19.13      N
ATOM 8608 CA  VAL C 279   39.946 79.399 82.996 1.00 19.38      C
ATOM 8610 CB  VAL C 279   38.422 79.263 83.218 1.00 19.63      C
ATOM 8612 CG1 VAL C 279   38.068 79.485 84.675 1.00 19.71      C
ATOM 8616 CG2 VAL C 279   37.673 80.259 82.351 1.00 19.37      C
ATOM 8620 C   VAL C 279   40.742 78.717 84.107 1.00 19.42      C
ATOM 8621 O   VAL C 279   41.283 79.385 84.977 1.00 18.84      O
ATOM 8622 N   GLN C 280   40.844 77.397 84.038 1.00 20.05      N
ATOM 8624 CA  GLN C 280   41.561 76.610 85.038 1.00 20.99      C
ATOM 8626 CB  GLN C 280   41.387 75.099 84.779 1.00 21.16      C
ATOM 8629 CG  GLN C 280   39.938 74.621 85.031 1.00 22.87      C
ATOM 8632 CD  GLN C 280   39.677 73.134 84.764 1.00 23.27      C
ATOM 8633 OE1 GLN C 280   40.022 72.595 83.702 1.00 23.04      O
ATOM 8634 NE2 GLN C 280   39.007 72.493 85.708 1.00 21.18      N
ATOM 8637 C   GLN C 280   43.028 76.992 85.069 1.00 21.43      C
ATOM 8638 O   GLN C 280   43.582 77.252 86.122 1.00 22.17      O
ATOM 8639 N   GLU C 281   43.648 77.043 83.906 1.00 21.62      N
ATOM 8641 CA  GLU C 281   45.040 77.401 83.811 1.00 22.14      C
ATOM 8643 CB  GLU C 281   45.458 77.362 82.350 1.00 22.58      C
ATOM 8646 CG  GLU C 281   45.460 75.961 81.784 1.00 23.93      C
ATOM 8649 CD  GLU C 281   46.005 75.892 80.377 1.00 25.78      C
ATOM 8650 OE1 GLU C 281   46.484 76.928 79.869 1.00 25.80      O
ATOM 8651 OE2 GLU C 281   45.953 74.781 79.794 1.00 28.08      O
ATOM 8652 C   GLU C 281   45.348 78.793 84.361 1.00 22.28      C
ATOM 8653 O   GLU C 281   46.351 79.012 85.047 1.00 22.14      O
ATOM 8654 N   ILE C 282   44.504 79.745 84.024 1.00 22.54      N
ATOM 8656 CA  ILE C 282   44.670 81.095 84.519 1.00 22.92      C
ATOM 8658 CB  ILE C 282   43.659 82.024 83.863 1.00 22.97      C
ATOM 8660 CG1 ILE C 282   43.989 82.210 82.383 1.00 23.12      C
ATOM 8663 CD1 ILE C 282   42.862 82.862 81.586 1.00 23.40      C
ATOM 8667 CG2 ILE C 282   43.652 83.368 84.588 1.00 24.23      C
ATOM 8671 C   ILE C 282   44.509 81.164 86.050 1.00 23.31      C
ATOM 8672 O   ILE C 282   45.172 81.981 86.687 1.00 24.19      O
ATOM 8673 N   VAL C 283   43.623 80.349 86.636 1.00 22.61      N
ATOM 8675 CA  VAL C 283   43.436 80.374 88.075 1.00 22.32      C
ATOM 8677 CB  VAL C 283   42.161 79.568 88.543 1.00 22.19      C
ATOM 8679 CG1 VAL C 283   42.222 79.274 90.040 1.00 21.88      C
ATOM 8683 CG2 VAL C 283   40.885 80.333 88.239 1.00 20.78      C
ATOM 8687 C   VAL C 283   44.711 79.834 88.757 1.00 22.63      C
ATOM 8688 O   VAL C 283   45.164 80.367 89.776 1.00 22.75      O
ATOM 8689 N   ASP C 284   45.279 78.771 88.202 1.00 22.59      N

| ATOM | 8691 | CA | ASP C 284 | 46.484 | 78.174 | 88.761 | 1.00 | 22.78 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 8693 | CB | ASP C 284 | 46.843 | 76.887 | 88.033 | 1.00 | 23.50 | C |
| ATOM | 8696 | CG | ASP C 284 | 45.915 | 75.767 | 88.355 | 1.00 | 25.75 | C |
| ATOM | 8697 | OD1 | ASP C 284 | 45.928 | 74.776 | 87.589 | 1.00 | 30.52 | O |
| ATOM | 8698 | OD2 | ASP C 284 | 45.144 | 75.788 | 89.345 | 1.00 | 29.12 | O |
| ATOM | 8699 | C | ASP C 284 | 47.634 | 79.119 | 88.620 | 1.00 | 22.09 | C |
| ATOM | 8700 | O | ASP C 284 | 48.455 | 79.250 | 89.520 | 1.00 | 22.04 | O |
| ATOM | 8701 | N | PHE C 285 | 47.697 | 79.781 | 87.473 | 1.00 | 21.76 | N |
| ATOM | 8703 | CA | PHE C 285 | 48.791 | 80.695 | 87.216 | 1.00 | 21.35 | C |
| ATOM | 8705 | CB | PHE C 285 | 48.822 | 81.161 | 85.760 | 1.00 | 20.96 | C |
| ATOM | 8708 | CG | PHE C 285 | 49.906 | 82.156 | 85.483 | 1.00 | 20.14 | C |
| ATOM | 8709 | CD1 | PHE C 285 | 51.211 | 81.785 | 85.451 | 1.00 | 20.14 | C |
| ATOM | 8711 | CE1 | PHE C 285 | 52.190 | 82.731 | 85.214 | 1.00 | 19.57 | C |
| ATOM | 8713 | CZ | PHE C 285 | 51.880 | 84.028 | 85.036 | 1.00 | 17.52 | C |
| ATOM | 8715 | CE2 | PHE C 285 | 50.621 | 84.408 | 85.070 | 1.00 | 20.11 | C |
| ATOM | 8717 | CD2 | PHE C 285 | 49.618 | 83.478 | 85.296 | 1.00 | 21.14 | C |
| ATOM | 8719 | C | PHE C 285 | 48.748 | 81.873 | 88.208 | 1.00 | 21.51 | C |
| ATOM | 8720 | O | PHE C 285 | 49.776 | 82.187 | 88.819 | 1.00 | 21.70 | O |
| ATOM | 8721 | N | ALA C 286 | 47.573 | 82.476 | 88.411 | 1.00 | 21.08 | N |
| ATOM | 8723 | CA | ALA C 286 | 47.447 | 83.633 | 89.303 | 1.00 | 21.05 | C |
| ATOM | 8725 | CB | ALA C 286 | 46.036 | 84.111 | 89.347 | 1.00 | 20.86 | C |
| ATOM | 8729 | C | ALA C 286 | 47.933 | 83.331 | 90.717 | 1.00 | 21.37 | C |
| ATOM | 8730 | O | ALA C 286 | 48.581 | 84.183 | 91.346 | 1.00 | 20.40 | O |
| ATOM | 8731 | N | LYS C 287 | 47.632 | 82.108 | 91.181 | 1.00 | 21.89 | N |
| ATOM | 8733 | CA | LYS C 287 | 48.037 | 81.617 | 92.494 | 1.00 | 22.91 | C |
| ATOM | 8735 | CB | LYS C 287 | 47.450 | 80.200 | 92.767 | 1.00 | 24.20 | C |
| ATOM | 8738 | CG | LYS C 287 | 45.998 | 80.062 | 93.408 | 1.00 | 28.09 | C |
| ATOM | 8741 | CD | LYS C 287 | 45.073 | 81.324 | 93.216 | 1.00 | 33.90 | C |
| ATOM | 8744 | CE | LYS C 287 | 43.517 | 81.009 | 93.140 | 1.00 | 36.88 | C |
| ATOM | 8747 | NZ | LYS C 287 | 42.894 | 80.562 | 94.443 | 1.00 | 36.46 | N |
| ATOM | 8751 | C | LYS C 287 | 49.568 | 81.580 | 92.624 | 1.00 | 22.37 | C |
| ATOM | 8752 | O | LYS C 287 | 50.078 | 81.671 | 93.730 | 1.00 | 22.07 | O |
| ATOM | 8753 | N | GLN C 288 | 50.289 | 81.419 | 91.507 | 1.00 | 22.16 | N |
| ATOM | 8755 | CA | GLN C 288 | 51.767 | 81.415 | 91.511 | 1.00 | 22.02 | C |
| ATOM | 8757 | CB | GLN C 288 | 52.344 | 80.364 | 90.525 | 1.00 | 22.35 | C |
| ATOM | 8760 | CG | GLN C 288 | 52.179 | 78.882 | 90.981 | 1.00 | 24.94 | C |
| ATOM | 8763 | CD | GLN C 288 | 53.223 | 78.394 | 92.061 | 1.00 | 29.71 | C |
| ATOM | 8764 | OE1 | GLN C 288 | 53.582 | 79.133 | 93.000 | 1.00 | 33.10 | O |
| ATOM | 8765 | NE2 | GLN C 288 | 53.689 | 77.148 | 91.914 | 1.00 | 30.72 | N |
| ATOM | 8768 | C | GLN C 288 | 52.403 | 82.787 | 91.271 | 1.00 | 20.81 | C |
| ATOM | 8769 | O | GLN C 288 | 53.608 | 82.910 | 91.281 | 1.00 | 20.00 | O |
| ATOM | 8770 | N | VAL C 289 | 51.595 | 83.814 | 91.054 | 1.00 | 20.62 | N |
| ATOM | 8772 | CA | VAL C 289 | 52.101 | 85.189 | 90.927 | 1.00 | 20.38 | C |
| ATOM | 8774 | CB | VAL C 289 | 51.119 | 86.084 | 90.141 | 1.00 | 20.08 | C |
| ATOM | 8776 | CG1 | VAL C 289 | 51.611 | 87.489 | 90.103 | 1.00 | 20.13 | C |
| ATOM | 8780 | CG2 | VAL C 289 | 50.922 | 85.567 | 88.728 | 1.00 | 19.83 | C |
| ATOM | 8784 | C | VAL C 289 | 52.285 | 85.775 | 92.337 | 1.00 | 20.40 | C |
| ATOM | 8785 | O | VAL C 289 | 51.306 | 85.863 | 93.089 | 1.00 | 20.53 | O |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ATOM | 8786 | N | PRO | C 290 | 53.508 | 86.160 | 92.722 | 1.00 20.04 | N |
| ATOM | 8787 | CA | PRO | C 290 | 53.716 | 86.672 | 94.083 | 1.00 19.48 | C |
| ATOM | 8789 | CB | PRO | C 290 | 55.193 | 87.062 | 94.105 | 1.00 19.41 | C |
| ATOM | 8792 | CG | PRO | C 290 | 55.833 | 86.367 | 92.956 | 1.00 19.42 | C |
| ATOM | 8795 | CD | PRO | C 290 | 54.763 | 86.136 | 91.944 | 1.00 19.87 | C |
| ATOM | 8798 | C | PRO | C 290 | 52.819 | 87.879 | 94.342 | 1.00 19.25 | C |
| ATOM | 8799 | O | PRO | C 290 | 52.659 | 88.740 | 93.473 | 1.00 18.38 | O |
| ATOM | 8800 | N | GLY | C 291 | 52.218 | 87.919 | 95.525 | 1.00 19.53 | N |
| ATOM | 8802 | CA | GLY | C 291 | 51.323 | 89.009 | 95.886 | 1.00 19.72 | C |
| ATOM | 8805 | C | GLY | C 291 | 49.852 | 88.656 | 95.740 | 1.00 20.00 | C |
| ATOM | 8806 | O | GLY | C 291 | 49.038 | 89.109 | 96.516 | 1.00 19.68 | O |
| ATOM | 8807 | N | PHE | C 292 | 49.511 | 87.845 | 94.738 | 1.00 20.11 | N |
| ATOM | 8809 | CA | PHE | C 292 | 48.134 | 87.538 | 94.451 | 1.00 19.77 | C |
| ATOM | 8811 | CB | PHE | C 292 | 48.020 | 86.597 | 93.250 | 1.00 19.74 | C |
| ATOM | 8814 | CG | PHE | C 292 | 46.603 | 86.360 | 92.821 | 1.00 18.39 | C |
| ATOM | 8815 | CD1 | PHE | C 292 | 45.900 | 87.341 | 92.157 | 1.00 17.92 | C |
| ATOM | 8817 | CE1 | PHE | C 292 | 44.579 | 87.142 | 91.817 | 1.00 17.58 | C |
| ATOM | 8819 | CZ | PHE | C 292 | 43.960 | 85.950 | 92.128 | 1.00 16.95 | C |
| ATOM | 8821 | CE2 | PHE | C 292 | 44.657 | 84.976 | 92.776 | 1.00 15.96 | C |
| ATOM | 8823 | CD2 | PHE | C 292 | 45.957 | 85.189 | 93.145 | 1.00 16.46 | C |
| ATOM | 8825 | C | PHE | C 292 | 47.458 | 86.946 | 95.661 | 1.00 20.36 | C |
| ATOM | 8826 | O | PHE | C 292 | 46.442 | 87.449 | 96.083 | 1.00 20.37 | O |
| ATOM | 8827 | N | LEU | C 293 | 48.026 | 85.891 | 96.234 | 1.00 21.32 | N |
| ATOM | 8829 | CA | LEU | C 293 | 47.397 | 85.212 | 97.373 | 1.00 21.95 | C |
| ATOM | 8831 | CB | LEU | C 293 | 47.998 | 83.815 | 97.597 | 1.00 21.81 | C |
| ATOM | 8834 | CG | LEU | C 293 | 47.667 | 82.680 | 96.614 | 1.00 21.20 | C |
| ATOM | 8836 | CD1 | LEU | C 293 | 48.479 | 81.475 | 96.968 | 1.00 21.14 | C |
| ATOM | 8840 | CD2 | LEU | C 293 | 46.203 | 82.287 | 96.583 | 1.00 21.07 | C |
| ATOM | 8844 | C | LEU | C 293 | 47.476 | 86.023 | 98.671 | 1.00 23.07 | C |
| ATOM | 8845 | O | LEU | C 293 | 46.901 | 85.605 | 99.690 | 1.00 23.23 | O |
| ATOM | 8846 | N | GLN | C 294 | 48.204 | 87.149 | 98.633 | 1.00 24.35 | N |
| ATOM | 8848 | CA | GLN | C 294 | 48.249 | 88.137 | 99.730 | 1.00 25.42 | C |
| ATOM | 8850 | CB | GLN | C 294 | 49.418 | 89.148 | 99.588 | 1.00 26.23 | C |
| ATOM | 8853 | CG | GLN | C 294 | 50.695 | 88.853 | 100.392 | 1.00 29.60 | C |
| ATOM | 8856 | CD | GLN | C 294 | 51.547 | 87.742 | 99.774 | 1.00 35.06 | C |
| ATOM | 8857 | OE1 | GLN | C 294 | 52.159 | 87.936 | 98.705 | 1.00 38.85 | O |
| ATOM | 8858 | NE2 | GLN | C 294 | 51.576 | 86.564 | 100.433 | 1.00 36.90 | N |
| ATOM | 8861 | C | GLN | C 294 | 46.944 | 88.916 | 99.799 | 1.00 24.88 | C |
| ATOM | 8862 | O | GLN | C 294 | 46.451 | 89.156 | 100.878 | 1.00 25.51 | O |
| ATOM | 8863 | N | LEU | C 295 | 46.407 | 89.322 | 98.651 | 1.00 24.46 | N |
| ATOM | 8865 | CA | LEU | C 295 | 45.109 | 89.987 | 98.571 | 1.00 24.18 | C |
| ATOM | 8867 | CB | LEU | C 295 | 44.701 | 90.228 | 97.101 | 1.00 24.14 | C |
| ATOM | 8870 | CG | LEU | C 295 | 45.531 | 91.273 | 96.334 | 1.00 25.01 | C |
| ATOM | 8872 | CD1 | LEU | C 295 | 45.279 | 91.235 | 94.831 | 1.00 25.31 | C |
| ATOM | 8876 | CD2 | LEU | C 295 | 45.272 | 92.690 | 96.830 | 1.00 26.82 | C |
| ATOM | 8880 | C | LEU | C 295 | 44.077 | 89.103 | 99.232 | 1.00 23.84 | C |
| ATOM | 8881 | O | LEU | C 295 | 44.241 | 87.900 | 99.255 | 1.00 23.57 | O |
| ATOM | 8882 | N | GLY | C 296 | 43.014 | 89.692 | 99.766 | 1.00 23.81 | N |

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ATOM  8884 CA  GLY C 296    41.932 88.918 100.359 1.00 24.24        C
ATOM  8887 C   GLY C 296    41.176 88.180  99.282 1.00 24.60        C
ATOM  8888 O   GLY C 296    41.317 88.516  98.141 1.00 25.20        O
ATOM  8889 N   ARG C 297    40.382 87.178  99.616 1.00 25.29        N
ATOM  8891 CA  ARG C 297    39.701 86.402  98.580 1.00 25.96        C
ATOM  8893 CB  ARG C 297    38.886 85.236  99.167 1.00 26.96        C
ATOM  8896 CG  ARG C 297    38.658 84.012  98.216 1.00 30.64        C
ATOM  8899 CD  ARG C 297    38.116 82.739  98.985 1.00 36.42        C
ATOM  8902 NE  ARG C 297    37.400 81.748  98.153 1.00 40.44        N
ATOM  8904 CZ  ARG C 297    36.145 81.884  97.675 1.00 43.02        C
ATOM  8905 NH1 ARG C 297    35.423 82.984  97.920 1.00 43.84        N
ATOM  8908 NH2 ARG C 297    35.607 80.911  96.939 1.00 43.40        N
ATOM  8911 C   ARG C 297    38.793 87.275  97.737 1.00 25.23        C
ATOM  8912 O   ARG C 297    38.711 87.058  96.533 1.00 25.49        O
ATOM  8913 N   GLU C 298    38.109 88.252  98.332 1.00 24.35        N
ATOM  8915 CA  GLU C 298    37.149 89.043  97.548 1.00 23.70        C
ATOM  8917 CB  GLU C 298    36.478 90.111  98.404 1.00 23.99        C
ATOM  8920 CG  GLU C 298    35.483 89.554  99.418 1.00 26.24        C
ATOM  8923 CD  GLU C 298    36.128 89.176 100.739 1.00 29.32        C
ATOM  8924 OE1 GLU C 298    37.249 89.667 100.996 1.00 30.46        O
ATOM  8925 OE2 GLU C 298    35.521 88.387 101.518 1.00 31.60        O
ATOM  8926 C   GLU C 298    37.843 89.675  96.329 1.00 22.40        C
ATOM  8927 O   GLU C 298    37.306 89.686  95.224 1.00 21.30        O
ATOM  8928 N   ASP C 299    39.059 90.158  96.551 1.00 21.45        N
ATOM  8930 CA  ASP C 299    39.857 90.796  95.517 1.00 21.01        C
ATOM  8932 CB  ASP C 299    40.911 91.725  96.130 1.00 20.70        C
ATOM  8935 CG  ASP C 299    40.315 93.056  96.599 1.00 21.37        C
ATOM  8936 OD1 ASP C 299    39.244 93.430  96.077 1.00 21.01        O
ATOM  8937 OD2 ASP C 299    40.827 93.789  97.487 1.00 22.23        O
ATOM  8938 C   ASP C 299    40.497 89.803  94.561 1.00 20.83        C
ATOM  8939 O   ASP C 299    40.613 90.085  93.372 1.00 21.04        O
ATOM  8940 N   GLN C 300    40.904 88.648  95.055 1.00 20.50        N
ATOM  8942 CA  GLN C 300    41.388 87.596  94.176 1.00 20.66        C
ATOM  8944 CB  GLN C 300    41.731 86.315  94.970 1.00 20.16        C
ATOM  8947 CG  GLN C 300    42.991 86.449  95.870 1.00 18.84        C
ATOM  8950 CD  GLN C 300    43.195 85.243  96.745 1.00 16.77        C
ATOM  8951 OE1 GLN C 300    43.030 84.136  96.271 1.00 18.45        O
ATOM  8952 NE2 GLN C 300    43.543 85.442  98.014 1.00 13.14        N
ATOM  8955 C   GLN C 300    40.331 87.313  93.094 1.00 21.42        C
ATOM  8956 O   GLN C 300    40.639 87.268  91.886 1.00 21.43        O
ATOM  8957 N   ILE C 301    39.090 87.163  93.540 1.00 21.90        N
ATOM  8959 CA  ILE C 301    37.971 86.851  92.662 1.00 22.51        C
ATOM  8961 CB  ILE C 301    36.708 86.448  93.504 1.00 22.67        C
ATOM  8963 CG1 ILE C 301    36.953 85.082  94.166 1.00 22.78        C
ATOM  8966 CD1 ILE C 301    36.086 84.819  95.338 1.00 22.78        C
ATOM  8970 CG2 ILE C 301    35.434 86.413  92.646 1.00 21.69        C
ATOM  8974 C   ILE C 301    37.654 87.973  91.670 1.00 22.92        C
ATOM  8975 O   ILE C 301    37.496 87.704  90.483 1.00 23.46        O
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| ATOM | 8976 | N | ALA C 302 | 37.567 | 89.213 | 92.136 | 1.00 | 23.44 | N |
|---|---|---|---|---|---|---|---|---|---|
| ATOM | 8978 | CA | ALA C 302 | 37.297 | 90.358 | 91.248 | 1.00 | 23.74 | C |
| ATOM | 8980 | CB | ALA C 302 | 37.138 | 91.667 | 92.071 | 1.00 | 23.62 | C |
| ATOM | 8984 | C | ALA C 302 | 38.393 | 90.525 | 90.165 | 1.00 | 24.17 | C |
| ATOM | 8985 | O | ALA C 302 | 38.090 | 90.652 | 88.972 | 1.00 | 24.10 | O |
| ATOM | 8986 | N | LEU C 303 | 39.664 | 90.517 | 90.589 | 1.00 | 24.48 | N |
| ATOM | 8988 | CA | LEU C 303 | 40.801 | 90.572 | 89.664 | 1.00 | 24.40 | C |
| ATOM | 8990 | CB | LEU C 303 | 42.128 | 90.542 | 90.432 | 1.00 | 23.92 | C |
| ATOM | 8993 | CG | LEU C 303 | 42.414 | 91.805 | 91.252 | 1.00 | 24.25 | C |
| ATOM | 8995 | CD1 | LEU C 303 | 43.847 | 91.835 | 91.698 | 1.00 | 24.50 | C |
| ATOM | 8999 | CD2 | LEU C 303 | 42.082 | 93.091 | 90.497 | 1.00 | 24.83 | C |
| ATOM | 9003 | C | LEU C 303 | 40.764 | 89.470 | 88.593 | 1.00 | 24.94 | C |
| ATOM | 9004 | O | LEU C 303 | 40.794 | 89.757 | 87.414 | 1.00 | 25.28 | O |
| ATOM | 9005 | N | LEU C 304 | 40.683 | 88.216 | 88.989 | 1.00 | 25.46 | N |
| ATOM | 9007 | CA | LEU C 304 | 40.559 | 87.137 | 88.007 | 1.00 | 26.09 | C |
| ATOM | 9009 | CB | LEU C 304 | 40.622 | 85.767 | 88.704 | 1.00 | 26.51 | C |
| ATOM | 9012 | CG | LEU C 304 | 42.003 | 85.320 | 89.130 | 1.00 | 27.18 | C |
| ATOM | 9014 | CD1 | LEU C 304 | 41.980 | 83.863 | 89.418 | 1.00 | 28.09 | C |
| ATOM | 9018 | CD2 | LEU C 304 | 43.012 | 85.629 | 88.029 | 1.00 | 29.72 | C |
| ATOM | 9022 | C | LEU C 304 | 39.281 | 87.195 | 87.177 | 1.00 | 25.82 | C |
| ATOM | 9023 | O | LEU C 304 | 39.242 | 86.775 | 86.013 | 1.00 | 25.58 | O |
| ATOM | 9024 | N | LYS C 305 | 38.218 | 87.696 | 87.761 | 1.00 | 25.64 | N |
| ATOM | 9026 | CA | LYS C 305 | 36.981 | 87.715 | 87.005 | 1.00 | 26.29 | C |
| ATOM | 9028 | CB | LYS C 305 | 35.813 | 88.203 | 87.881 | 1.00 | 26.84 | C |
| ATOM | 9031 | CG | LYS C 305 | 34.439 | 87.892 | 87.295 | 1.00 | 30.10 | C |
| ATOM | 9034 | CD | LYS C 305 | 33.308 | 88.353 | 88.246 | 1.00 | 34.41 | C |
| ATOM | 9037 | CE | LYS C 305 | 31.984 | 88.662 | 87.500 | 1.00 | 35.16 | C |
| ATOM | 9040 | NZ | LYS C 305 | 30.803 | 88.364 | 88.382 | 1.00 | 36.56 | N |
| ATOM | 9044 | C | LYS C 305 | 37.182 | 88.593 | 85.752 | 1.00 | 25.12 | C |
| ATOM | 9045 | O | LYS C 305 | 36.856 | 88.214 | 84.648 | 1.00 | 23.92 | O |
| ATOM | 9046 | N | ALA C 306 | 37.767 | 89.761 | 85.964 | 1.00 | 24.83 | N |
| ATOM | 9048 | CA | ALA C 306 | 37.904 | 90.763 | 84.933 | 1.00 | 24.69 | C |
| ATOM | 9050 | CB | ALA C 306 | 38.142 | 92.079 | 85.587 | 1.00 | 24.53 | C |
| ATOM | 9054 | C | ALA C 306 | 39.054 | 90.419 | 83.971 | 1.00 | 24.75 | C |
| ATOM | 9055 | O | ALA C 306 | 38.947 | 90.612 | 82.759 | 1.00 | 24.53 | O |
| ATOM | 9056 | N | SER C 307 | 40.132 | 89.891 | 84.536 | 1.00 | 24.19 | N |
| ATOM | 9058 | CA | SER C 307 | 41.307 | 89.510 | 83.797 | 1.00 | 24.60 | C |
| ATOM | 9060 | CB | SER C 307 | 42.416 | 89.097 | 84.766 | 1.00 | 24.97 | C |
| ATOM | 9063 | OG | SER C 307 | 43.144 | 90.243 | 85.182 | 1.00 | 29.53 | O |
| ATOM | 9065 | C | SER C 307 | 41.142 | 88.334 | 82.868 | 1.00 | 24.11 | C |
| ATOM | 9066 | O | SER C 307 | 41.913 | 88.210 | 81.904 | 1.00 | 24.50 | O |
| ATOM | 9067 | N | THR C 308 | 40.216 | 87.428 | 83.179 | 1.00 | 22.90 | N |
| ATOM | 9069 | CA | THR C 308 | 40.264 | 86.105 | 82.578 | 1.00 | 22.16 | C |
| ATOM | 9071 | CB | THR C 308 | 39.182 | 85.214 | 83.140 | 1.00 | 22.11 | C |
| ATOM | 9073 | OG1 | THR C 308 | 39.520 | 84.866 | 84.471 | 1.00 | 22.43 | O |
| ATOM | 9075 | CG2 | THR C 308 | 39.183 | 83.857 | 82.474 | 1.00 | 22.57 | C |
| ATOM | 9079 | C | THR C 308 | 40.153 | 86.169 | 81.076 | 1.00 | 21.89 | C |
| ATOM | 9080 | O | THR C 308 | 40.914 | 85.513 | 80.355 | 1.00 | 21.92 | O |

| ATOM | 9081 | N   | ILE C 309 | 39.208 86.954 80.592 1.00 21.40 | N |
| ATOM | 9083 | CA  | ILE C 309 | 39.023 87.048 79.154 1.00 21.25 | C |
| ATOM | 9085 | CB  | ILE C 309 | 37.712 87.774 78.822 1.00 20.90 | C |
| ATOM | 9087 | CG1 | ILE C 309 | 37.416 87.631 77.344 1.00 20.93 | C |
| ATOM | 9090 | CD1 | ILE C 309 | 37.472 86.250 76.858 1.00 21.61 | C |
| ATOM | 9094 | CG2 | ILE C 309 | 37.762 89.254 79.214 1.00 20.66 | C |
| ATOM | 9098 | C   | ILE C 309 | 40.213 87.720 78.474 1.00 21.81 | C |
| ATOM | 9099 | O   | ILE C 309 | 40.563 87.401 77.336 1.00 22.57 | O |
| ATOM | 9100 | N   | GLU C 310 | 40.818 88.682 79.166 1.00 21.86 | N |
| ATOM | 9102 | CA  | GLU C 310 | 41.905 89.450 78.600 1.00 20.98 | C |
| ATOM | 9104 | CB  | GLU C 310 | 42.221 90.682 79.447 1.00 20.83 | C |
| ATOM | 9107 | CG  | GLU C 310 | 41.015 91.617 79.538 1.00 20.94 | C |
| ATOM | 9110 | CD  | GLU C 310 | 41.296 92.901 80.275 1.00 20.86 | C |
| ATOM | 9111 | OE1 | GLU C 310 | 42.476 93.127 80.564 1.00 21.98 | O |
| ATOM | 9112 | OE2 | GLU C 310 | 40.343 93.668 80.573 1.00 19.88 | O |
| ATOM | 9113 | C   | GLU C 310 | 43.058 88.523 78.491 1.00 20.63 | C |
| ATOM | 9114 | O   | GLU C 310 | 43.712 88.509 77.469 1.00 21.17 | O |
| ATOM | 9115 | N   | ILE C 311 | 43.290 87.699 79.500 1.00 20.65 | N |
| ATOM | 9117 | CA  | ILE C 311 | 44.471 86.830 79.474 1.00 20.84 | C |
| ATOM | 9119 | CB  | ILE C 311 | 44.759 86.187 80.846 1.00 21.33 | C |
| ATOM | 9121 | CG1 | ILE C 311 | 45.413 87.194 81.797 1.00 21.11 | C |
| ATOM | 9124 | CD1 | ILE C 311 | 45.275 86.773 83.279 1.00 21.03 | C |
| ATOM | 9128 | CG2 | ILE C 311 | 45.691 84.973 80.742 1.00 22.06 | C |
| ATOM | 9132 | C   | ILE C 311 | 44.287 85.782 78.404 1.00 21.02 | C |
| ATOM | 9133 | O   | ILE C 311 | 45.278 85.423 77.777 1.00 21.65 | O |
| ATOM | 9134 | N   | MET C 312 | 43.045 85.319 78.164 1.00 20.81 | N |
| ATOM | 9136 | CA  | MET C 312 | 42.738 84.365 77.068 1.00 20.33 | C |
| ATOM | 9138 | CB  | MET C 312 | 41.282 83.934 77.084 1.00 20.38 | C |
| ATOM | 9141 | CG  | MET C 312 | 40.907 83.010 78.244 1.00 22.03 | C |
| ATOM | 9144 | SD  | MET C 312 | 39.130 82.820 78.407 1.00 23.29 | S |
| ATOM | 9145 | CE  | MET C 312 | 39.092 81.695 79.650 1.00 26.02 | C |
| ATOM | 9149 | C   | MET C 312 | 43.004 84.975 75.707 1.00 20.48 | C |
| ATOM | 9150 | O   | MET C 312 | 43.417 84.277 74.774 1.00 20.46 | O |
| ATOM | 9151 | N   | LEU C 313 | 42.761 86.288 75.588 1.00 20.32 | N |
| ATOM | 9153 | CA  | LEU C 313 | 43.016 87.002 74.349 1.00 19.95 | C |
| ATOM | 9155 | CB  | LEU C 313 | 42.349 88.349 74.395 1.00 19.65 | C |
| ATOM | 9158 | CG  | LEU C 313 | 40.838 88.317 74.231 1.00 20.60 | C |
| ATOM | 9160 | CD1 | LEU C 313 | 40.323 89.657 74.601 1.00 22.49 | C |
| ATOM | 9164 | CD2 | LEU C 313 | 40.421 88.043 72.809 1.00 22.11 | C |
| ATOM | 9168 | C   | LEU C 313 | 44.517 87.114 74.062 1.00 20.48 | C |
| ATOM | 9169 | O   | LEU C 313 | 44.970 86.986 72.910 1.00 19.41 | O |
| ATOM | 9170 | N   | LEU C 314 | 45.285 87.350 75.119 1.00 21.36 | N |
| ATOM | 9172 | CA  | LEU C 314 | 46.742 87.304 75.031 1.00 22.27 | C |
| ATOM | 9174 | CB  | LEU C 314 | 47.378 87.756 76.341 1.00 22.10 | C |
| ATOM | 9177 | CG  | LEU C 314 | 48.051 89.097 76.593 1.00 22.13 | C |
| ATOM | 9179 | CD1 | LEU C 314 | 47.813 90.060 75.558 1.00 23.29 | C |
| ATOM | 9183 | CD2 | LEU C 314 | 47.573 89.669 77.902 1.00 23.63 | C |
| ATOM | 9187 | C   | LEU C 314 | 47.219 85.871 74.675 1.00 23.00 | C |

| ATOM | 9188 | O | LEU | C | 314 | 47.987 | 85.708 | 73.731 | 1.00 | 23.62 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 9189 | N | GLU | C | 315 | 46.781 | 84.842 | 75.403 | 1.00 | 23.38 | N |
| ATOM | 9191 | CA | GLU | C | 315 | 47.194 | 83.441 | 75.088 | 1.00 | 23.93 | C |
| ATOM | 9193 | CB | GLU | C | 315 | 46.679 | 82.410 | 76.120 | 1.00 | 24.28 | C |
| ATOM | 9196 | CG | GLU | C | 315 | 47.382 | 82.504 | 77.476 | 1.00 | 27.22 | C |
| ATOM | 9199 | CD | GLU | C | 315 | 48.870 | 82.108 | 77.415 | 1.00 | 30.37 | C |
| ATOM | 9200 | OE1 | GLU | C | 315 | 49.186 | 81.092 | 76.775 | 1.00 | 32.39 | O |
| ATOM | 9201 | OE2 | GLU | C | 315 | 49.728 | 82.806 | 77.994 | 1.00 | 31.87 | O |
| ATOM | 9202 | C | GLU | C | 315 | 46.745 | 83.017 | 73.700 | 1.00 | 23.07 | C |
| ATOM | 9203 | O | GLU | C | 315 | 47.485 | 82.353 | 73.000 | 1.00 | 23.02 | O |
| ATOM | 9204 | N | THR | C | 316 | 45.539 | 83.428 | 73.307 | 1.00 | 22.38 | N |
| ATOM | 9206 | CA | THR | C | 316 | 45.020 | 83.212 | 71.946 | 1.00 | 21.67 | C |
| ATOM | 9208 | CB | THR | C | 316 | 43.589 | 83.855 | 71.857 | 1.00 | 21.88 | C |
| ATOM | 9210 | OG1 | THR | C | 316 | 42.615 | 83.046 | 72.539 | 1.00 | 20.43 | O |
| ATOM | 9212 | CG2 | THR | C | 316 | 43.091 | 83.941 | 70.394 | 1.00 | 22.37 | C |
| ATOM | 9216 | C | THR | C | 316 | 45.982 | 83.859 | 70.889 | 1.00 | 20.90 | C |
| ATOM | 9217 | O | THR | C | 316 | 46.480 | 83.209 | 69.976 | 1.00 | 19.95 | O |
| ATOM | 9218 | N | ALA | C | 317 | 46.228 | 85.148 | 71.048 | 1.00 | 20.05 | N |
| ATOM | 9220 | CA | ALA | C | 317 | 47.092 | 85.868 | 70.168 | 1.00 | 20.00 | C |
| ATOM | 9222 | CB | ALA | C | 317 | 47.249 | 87.275 | 70.678 | 1.00 | 20.45 | C |
| ATOM | 9226 | C | ALA | C | 317 | 48.438 | 85.175 | 70.092 | 1.00 | 20.26 | C |
| ATOM | 9227 | O | ALA | C | 317 | 48.931 | 84.875 | 69.034 | 1.00 | 19.99 | O |
| ATOM | 9228 | N | ARG | C | 318 | 49.031 | 84.887 | 71.230 | 1.00 | 21.12 | N |
| ATOM | 9230 | CA | ARG | C | 318 | 50.324 | 84.186 | 71.273 | 1.00 | 21.70 | C |
| ATOM | 9232 | CB | ARG | C | 318 | 50.663 | 83.913 | 72.735 | 1.00 | 22.23 | C |
| ATOM | 9235 | CG | ARG | C | 318 | 51.943 | 83.198 | 73.021 | 1.00 | 24.76 | C |
| ATOM | 9238 | CD | ARG | C | 318 | 51.980 | 82.735 | 74.441 | 1.00 | 29.47 | C |
| ATOM | 9241 | NE | ARG | C | 318 | 53.328 | 82.767 | 74.979 | 1.00 | 34.52 | N |
| ATOM | 9243 | CZ | ARG | C | 318 | 53.625 | 83.006 | 76.263 | 1.00 | 38.26 | C |
| ATOM | 9244 | NH1 | ARG | C | 318 | 52.668 | 83.248 | 77.171 | 1.00 | 39.13 | N |
| ATOM | 9247 | NH2 | ARG | C | 318 | 54.896 | 82.994 | 76.643 | 1.00 | 39.06 | N |
| ATOM | 9250 | C | ARG | C | 318 | 50.366 | 82.877 | 70.481 | 1.00 | 20.96 | C |
| ATOM | 9251 | O | ARG | C | 318 | 51.422 | 82.466 | 70.056 | 1.00 | 20.67 | O |
| ATOM | 9252 | N | ARG | C | 319 | 49.225 | 82.218 | 70.325 | 1.00 | 21.00 | N |
| ATOM | 9254 | CA | ARG | C | 319 | 49.137 | 80.935 | 69.613 | 1.00 | 21.52 | C |
| ATOM | 9256 | CB | ARG | C | 319 | 48.157 | 80.009 | 70.347 | 1.00 | 22.53 | C |
| ATOM | 9259 | CG | ARG | C | 319 | 48.761 | 79.186 | 71.485 | 1.00 | 25.78 | C |
| ATOM | 9262 | CD | ARG | C | 319 | 47.747 | 78.810 | 72.591 | 1.00 | 30.60 | C |
| ATOM | 9265 | NE | ARG | C | 319 | 48.453 | 78.230 | 73.736 | 1.00 | 34.90 | N |
| ATOM | 9267 | CZ | ARG | C | 319 | 49.208 | 78.920 | 74.610 | 1.00 | 36.03 | C |
| ATOM | 9268 | NH1 | ARG | C | 319 | 49.361 | 80.244 | 74.516 | 1.00 | 35.20 | N |
| ATOM | 9271 | NH2 | ARG | C | 319 | 49.813 | 78.268 | 75.594 | 1.00 | 36.20 | N |
| ATOM | 9274 | C | ARG | C | 319 | 48.661 | 81.085 | 68.167 | 1.00 | 20.46 | C |
| ATOM | 9275 | O | ARG | C | 319 | 48.460 | 80.095 | 67.474 | 1.00 | 19.77 | O |
| ATOM | 9276 | N | TYR | C | 320 | 48.473 | 82.329 | 67.738 | 1.00 | 19.64 | N |
| ATOM | 9278 | CA | TYR | C | 320 | 48.007 | 82.639 | 66.402 | 1.00 | 19.22 | C |
| ATOM | 9280 | CB | TYR | C | 320 | 47.636 | 84.135 | 66.256 | 1.00 | 19.39 | C |
| ATOM | 9283 | CG | TYR | C | 320 | 47.295 | 84.550 | 64.831 | 1.00 | 18.42 | C |

| ATOM | 9284 | CD1 | TYR | C | 320 | 46.083 | 84.202 | 64.253 | 1.00 | 17.75 | C |
| ATOM | 9286 | CE1 | TYR | C | 320 | 45.786 | 84.575 | 62.960 | 1.00 | 17.76 | C |
| ATOM | 9288 | CZ | TYR | C | 320 | 46.711 | 85.296 | 62.216 | 1.00 | 17.42 | C |
| ATOM | 9289 | OH | TYR | C | 320 | 46.429 | 85.661 | 60.914 | 1.00 | 19.24 | O |
| ATOM | 9291 | CE2 | TYR | C | 320 | 47.910 | 85.644 | 62.766 | 1.00 | 16.45 | C |
| ATOM | 9293 | CD2 | TYR | C | 320 | 48.196 | 85.271 | 64.064 | 1.00 | 17.01 | C |
| ATOM | 9295 | C | TYR | C | 320 | 49.054 | 82.281 | 65.377 | 1.00 | 18.95 | C |
| ATOM | 9296 | O | TYR | C | 320 | 50.175 | 82.733 | 65.450 | 1.00 | 18.89 | O |
| ATOM | 9297 | N | ASN | C | 321 | 48.659 | 81.474 | 64.407 | 1.00 | 18.89 | N |
| ATOM | 9299 | CA | ASN | C | 321 | 49.521 | 81.088 | 63.325 | 1.00 | 18.85 | C |
| ATOM | 9301 | CB | ASN | C | 321 | 49.367 | 79.594 | 63.116 | 1.00 | 19.14 | C |
| ATOM | 9304 | CG | ASN | C | 321 | 50.275 | 79.065 | 62.041 | 1.00 | 19.83 | C |
| ATOM | 9305 | OD1 | ASN | C | 321 | 51.307 | 78.491 | 62.336 | 1.00 | 23.90 | O |
| ATOM | 9306 | ND2 | ASN | C | 321 | 49.897 | 79.252 | 60.794 | 1.00 | 18.73 | N |
| ATOM | 9309 | C | ASN | C | 321 | 49.134 | 81.863 | 62.063 | 1.00 | 18.64 | C |
| ATOM | 9310 | O | ASN | C | 321 | 48.022 | 81.690 | 61.541 | 1.00 | 18.17 | O |
| ATOM | 9311 | N | HIS | C | 322 | 50.039 | 82.715 | 61.567 | 1.00 | 18.15 | N |
| ATOM | 9313 | CA | HIS | C | 322 | 49.694 | 83.563 | 60.428 | 1.00 | 17.63 | C |
| ATOM | 9315 | CB | HIS | C | 322 | 50.420 | 84.917 | 60.431 | 1.00 | 17.80 | C |
| ATOM | 9318 | CG | HIS | C | 322 | 49.822 | 85.919 | 59.480 | 1.00 | 18.50 | C |
| ATOM | 9319 | ND1 | HIS | C | 322 | 48.561 | 86.452 | 59.653 | 1.00 | 18.45 | N |
| ATOM | 9321 | CE1 | HIS | C | 322 | 48.288 | 87.275 | 58.656 | 1.00 | 17.20 | C |
| ATOM | 9323 | NE2 | HIS | C | 322 | 49.318 | 87.283 | 57.829 | 1.00 | 17.99 | N |
| ATOM | 9325 | CD2 | HIS | C | 322 | 50.290 | 86.441 | 58.318 | 1.00 | 18.66 | C |
| ATOM | 9327 | C | HIS | C | 322 | 49.871 | 82.858 | 59.102 | 1.00 | 16.73 | C |
| ATOM | 9328 | O | HIS | C | 322 | 49.287 | 83.293 | 58.124 | 1.00 | 16.50 | O |
| ATOM | 9329 | N | GLU | C | 323 | 50.631 | 81.765 | 59.047 | 1.00 | 16.36 | N |
| ATOM | 9331 | CA | GLU | C | 323 | 50.675 | 80.947 | 57.814 | 1.00 | 15.96 | C |
| ATOM | 9333 | CB | GLU | C | 323 | 51.686 | 79.810 | 57.935 | 1.00 | 16.08 | C |
| ATOM | 9336 | CG | GLU | C | 323 | 51.782 | 78.979 | 56.657 | 1.00 | 18.17 | C |
| ATOM | 9339 | CD | GLU | C | 323 | 52.870 | 77.917 | 56.678 | 1.00 | 19.03 | C |
| ATOM | 9340 | OE1 | GLU | C | 323 | 53.586 | 77.808 | 57.690 | 1.00 | 20.63 | O |
| ATOM | 9341 | OE2 | GLU | C | 323 | 52.994 | 77.177 | 55.683 | 1.00 | 18.53 | O |
| ATOM | 9342 | C | GLU | C | 323 | 49.284 | 80.384 | 57.421 | 1.00 | 15.03 | C |
| ATOM | 9343 | O | GLU | C | 323 | 48.955 | 80.296 | 56.247 | 1.00 | 13.86 | O |
| ATOM | 9344 | N | THR | C | 324 | 48.483 | 80.055 | 58.431 | 1.00 | 14.77 | N |
| ATOM | 9346 | CA | THR | C | 324 | 47.185 | 79.393 | 58.285 | 1.00 | 14.57 | C |
| ATOM | 9348 | CB | THR | C | 324 | 47.160 | 78.062 | 59.140 | 1.00 | 15.16 | C |
| ATOM | 9350 | OG1 | THR | C | 324 | 47.434 | 78.329 | 60.540 | 1.00 | 14.64 | O |
| ATOM | 9352 | CG2 | THR | C | 324 | 48.246 | 77.040 | 58.670 | 1.00 | 13.97 | C |
| ATOM | 9356 | C | THR | C | 324 | 46.002 | 80.275 | 58.706 | 1.00 | 14.25 | C |
| ATOM | 9357 | O | THR | C | 324 | 44.857 | 79.920 | 58.490 | 1.00 | 13.36 | O |
| ATOM | 9358 | N | GLU | C | 325 | 46.303 | 81.424 | 59.314 | 1.00 | 14.85 | N |
| ATOM | 9360 | CA | GLU | C | 325 | 45.313 | 82.384 | 59.849 | 1.00 | 14.59 | C |
| ATOM | 9362 | CB | GLU | C | 325 | 44.601 | 83.107 | 58.716 | 1.00 | 14.04 | C |
| ATOM | 9365 | CG | GLU | C | 325 | 45.546 | 84.001 | 57.941 | 1.00 | 12.44 | C |
| ATOM | 9368 | CD | GLU | C | 325 | 44.904 | 84.690 | 56.756 | 1.00 | 11.07 | C |
| ATOM | 9369 | OE1 | GLU | C | 325 | 43.662 | 84.777 | 56.678 | 1.00 | 10.49 | O |

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ATOM   9370 OE2 GLU C 325    45.663 85.167 55.899  1.00  9.70        O
ATOM   9371 C   GLU C 325    44.348 81.710 60.820  1.00 15.35        C
ATOM   9372 O   GLU C 325    43.140 81.847 60.734  1.00 15.10        O
ATOM   9373 N   CYS C 326    44.942 80.990 61.760  1.00 16.63        N
ATOM   9375 CA  CYS C 326    44.243 80.114 62.664  1.00 17.79        C
ATOM   9377 CB  CYS C 326    44.515 78.680 62.252  1.00 17.93        C
ATOM   9380 SG  CYS C 326    43.326 78.130 61.051  1.00 17.07        S
ATOM   9381 C   CYS C 326    44.775 80.287 64.047  1.00 19.77        C
ATOM   9382 O   CYS C 326    45.980 80.432 64.235  1.00 19.66        O
ATOM   9383 N   ILE C 327    43.882 80.248 65.025  1.00 22.43        N
ATOM   9385 CA  ILE C 327    44.283 80.131 66.423  1.00 24.44        C
ATOM   9387 CB  ILE C 327    43.214 80.733 67.310  1.00 24.68        C
ATOM   9389 CG1 ILE C 327    43.197 82.250 67.068  1.00 24.44        C
ATOM   9392 CD1 ILE C 327    41.889 82.845 67.350  1.00 25.51        C
ATOM   9396 CG2 ILE C 327    43.473 80.370 68.786  1.00 25.12        C
ATOM   9400 C   ILE C 327    44.547 78.676 66.782  1.00 26.15        C
ATOM   9401 O   ILE C 327    43.727 77.792 66.522  1.00 25.84        O
ATOM   9402 N   THR C 328    45.700 78.436 67.383  1.00 28.62        N
ATOM   9404 CA  THR C 328    46.125 77.075 67.670  1.00 30.85        C
ATOM   9406 CB  THR C 328    47.472 76.849 67.056  1.00 30.89        C
ATOM   9408 OG1 THR C 328    47.390 77.153 65.659  1.00 31.59        O
ATOM   9410 CG2 THR C 328    47.844 75.354 67.117  1.00 32.19        C
ATOM   9414 C   THR C 328    46.170 76.770 69.161  1.00 32.50        C
ATOM   9415 O   THR C 328    47.248 76.735 69.753  1.00 32.90        O
ATOM   9416 N   PHE C 329    44.985 76.564 69.744  1.00 34.40        N
ATOM   9418 CA  PHE C 329    44.814 76.137 71.136  1.00 35.56        C
ATOM   9420 CB  PHE C 329    43.352 75.806 71.391  1.00 35.71        C
ATOM   9423 CG  PHE C 329    42.971 75.773 72.846  1.00 37.29        C
ATOM   9424 CD1 PHE C 329    42.570 76.962 73.507  1.00 37.15        C
ATOM   9426 CE1 PHE C 329    42.181 76.942 74.852  1.00 36.69        C
ATOM   9428 CZ  PHE C 329    42.198 75.713 75.564  1.00 38.22        C
ATOM   9430 CE2 PHE C 329    42.591 74.497 74.899  1.00 37.78        C
ATOM   9432 CD2 PHE C 329    42.963 74.542 73.552  1.00 37.96        C
ATOM   9434 C   PHE C 329    45.677 74.915 71.484  1.00 36.59        C
ATOM   9435 O   PHE C 329    46.287 74.893 72.570  1.00 37.17        O
ATOM   9436 N   LEU C 330    45.742 73.920 70.582  1.00 37.22        N
ATOM   9438 CA  LEU C 330    46.641 72.740 70.750  1.00 37.98        C
ATOM   9440 CB  LEU C 330    45.912 71.602 71.491  1.00 38.39        C
ATOM   9443 CG  LEU C 330    46.350 71.300 72.931  1.00 40.08        C
ATOM   9445 CD1 LEU C 330    46.032 69.817 73.265  1.00 41.39        C
ATOM   9449 CD2 LEU C 330    47.845 71.598 73.186  1.00 40.84        C
ATOM   9453 C   LEU C 330    47.203 72.192 69.425  1.00 37.69        C
ATOM   9454 O   LEU C 330    46.727 72.554 68.360  1.00 38.18        O
ATOM   9455 N   LYS C 331    48.196 71.315 69.475  1.00 37.13        N
ATOM   9457 CA  LYS C 331    48.858 70.907 68.239  1.00 37.33        C
ATOM   9459 CB  LYS C 331    49.680 69.630 68.419  1.00 37.85        C
ATOM   9462 CG  LYS C 331    50.896 69.819 69.341  1.00 40.26        C
ATOM   9465 CD  LYS C 331    51.977 68.724 69.159  1.00 41.77        C
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| ATOM | 9468 | CE | LYS C 331 | 53.197 | 69.011 | 70.047 | 1.00 | 42.34 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 9471 | NZ | LYS C 331 | 54.455 | 68.791 | 69.293 | 1.00 | 43.43 | N |
| ATOM | 9475 | C | LYS C 331 | 47.855 | 70.704 | 67.115 | 1.00 | 36.47 | C |
| ATOM | 9476 | O | LYS C 331 | 47.883 | 71.427 | 66.110 | 1.00 | 37.10 | O |
| ATOM | 9477 | N | ASP C 332 | 46.949 | 69.745 | 67.299 | 1.00 | 35.03 | N |
| ATOM | 9479 | CA | ASP C 332 | 45.984 | 69.368 | 66.254 | 1.00 | 33.52 | C |
| ATOM | 9481 | CB | ASP C 332 | 45.735 | 67.856 | 66.326 | 1.00 | 33.42 | C |
| ATOM | 9484 | CG | ASP C 332 | 46.732 | 67.060 | 65.491 | 1.00 | 34.07 | C |
| ATOM | 9485 | OD1 | ASP C 332 | 47.472 | 67.662 | 64.683 | 1.00 | 34.43 | O |
| ATOM | 9486 | OD2 | ASP C 332 | 46.839 | 65.818 | 65.570 | 1.00 | 34.73 | O |
| ATOM | 9487 | C | ASP C 332 | 44.637 | 70.143 | 66.278 | 1.00 | 32.00 | C |
| ATOM | 9488 | O | ASP C 332 | 43.746 | 69.892 | 65.450 | 1.00 | 31.91 | O |
| ATOM | 9489 | N | PHE C 333 | 44.494 | 71.074 | 67.220 | 1.00 | 29.78 | N |
| ATOM | 9491 | CA | PHE C 333 | 43.245 | 71.783 | 67.422 | 1.00 | 28.34 | C |
| ATOM | 9493 | CB | PHE C 333 | 42.837 | 71.697 | 68.901 | 1.00 | 28.83 | C |
| ATOM | 9496 | CG | PHE C 333 | 42.336 | 70.323 | 69.334 | 1.00 | 30.95 | C |
| ATOM | 9497 | CD1 | PHE C 333 | 43.156 | 69.199 | 69.239 | 1.00 | 33.57 | C |
| ATOM | 9499 | CE1 | PHE C 333 | 42.697 | 67.944 | 69.626 | 1.00 | 34.89 | C |
| ATOM | 9501 | CZ | PHE C 333 | 41.402 | 67.795 | 70.120 | 1.00 | 34.94 | C |
| ATOM | 9503 | CE2 | PHE C 333 | 40.583 | 68.899 | 70.229 | 1.00 | 33.86 | C |
| ATOM | 9505 | CD2 | PHE C 333 | 41.049 | 70.160 | 69.847 | 1.00 | 32.43 | C |
| ATOM | 9507 | C | PHE C 333 | 43.442 | 73.230 | 66.975 | 1.00 | 26.25 | C |
| ATOM | 9508 | O | PHE C 333 | 43.950 | 74.058 | 67.737 | 1.00 | 26.49 | O |
| ATOM | 9509 | N | THR C 334 | 43.075 | 73.530 | 65.731 | 1.00 | 23.74 | N |
| ATOM | 9511 | CA | THR C 334 | 43.211 | 74.886 | 65.189 | 1.00 | 22.15 | C |
| ATOM | 9513 | CB | THR C 334 | 44.198 | 74.916 | 64.022 | 1.00 | 22.27 | C |
| ATOM | 9515 | OG1 | THR C 334 | 43.789 | 73.981 | 63.020 | 1.00 | 21.35 | O |
| ATOM | 9517 | CG2 | THR C 334 | 45.565 | 74.443 | 64.465 | 1.00 | 22.71 | C |
| ATOM | 9521 | C | THR C 334 | 41.886 | 75.436 | 64.726 | 1.00 | 20.28 | C |
| ATOM | 9522 | O | THR C 334 | 41.008 | 74.690 | 64.383 | 1.00 | 19.63 | O |
| ATOM | 9523 | N | TYR C 335 | 41.756 | 76.747 | 64.698 | 1.00 | 18.82 | N |
| ATOM | 9525 | CA | TYR C 335 | 40.469 | 77.370 | 64.438 | 1.00 | 18.55 | C |
| ATOM | 9527 | CB | TYR C 335 | 39.742 | 77.682 | 65.767 | 1.00 | 18.56 | C |
| ATOM | 9530 | CG | TYR C 335 | 39.672 | 76.472 | 66.671 | 1.00 | 17.82 | C |
| ATOM | 9531 | CD1 | TYR C 335 | 40.650 | 76.239 | 67.630 | 1.00 | 16.61 | C |
| ATOM | 9533 | CE1 | TYR C 335 | 40.623 | 75.103 | 68.408 | 1.00 | 17.81 | C |
| ATOM | 9535 | CZ | TYR C 335 | 39.599 | 74.180 | 68.254 | 1.00 | 18.25 | C |
| ATOM | 9536 | OH | TYR C 335 | 39.563 | 73.050 | 69.046 | 1.00 | 20.01 | O |
| ATOM | 9538 | CE2 | TYR C 335 | 38.617 | 74.395 | 67.315 | 1.00 | 17.94 | C |
| ATOM | 9540 | CD2 | TYR C 335 | 38.663 | 75.536 | 66.524 | 1.00 | 17.44 | C |
| ATOM | 9542 | C | TYR C 335 | 40.662 | 78.638 | 63.589 | 1.00 | 18.47 | C |
| ATOM | 9543 | O | TYR C 335 | 41.312 | 79.595 | 64.018 | 1.00 | 17.98 | O |
| ATOM | 9544 | N | SER C 336 | 40.128 | 78.605 | 62.367 | 1.00 | 18.11 | N |
| ATOM | 9546 | CA | SER C 336 | 40.004 | 79.782 | 61.510 | 1.00 | 17.60 | C |
| ATOM | 9548 | CB | SER C 336 | 39.716 | 79.335 | 60.101 | 1.00 | 17.17 | C |
| ATOM | 9551 | OG | SER C 336 | 38.417 | 78.800 | 60.047 | 1.00 | 15.50 | O |
| ATOM | 9553 | C | SER C 336 | 38.858 | 80.707 | 61.946 | 1.00 | 17.92 | C |
| ATOM | 9554 | O | SER C 336 | 38.074 | 80.379 | 62.836 | 1.00 | 16.89 | O |

| ATOM | 9555 | N | LYS C 337 | 38.754 81.862 61.287 1.00 18.32 | N |
| ATOM | 9557 | CA | LYS C 337 | 37.671 82.797 61.567 1.00 18.74 | C |
| ATOM | 9559 | CB | LYS C 337 | 37.830 84.105 60.797 1.00 18.47 | C |
| ATOM | 9562 | CG | LYS C 337 | 38.992 84.958 61.264 1.00 18.53 | C |
| ATOM | 9565 | CD | LYS C 337 | 38.728 86.436 61.031 1.00 19.47 | C |
| ATOM | 9568 | CE | LYS C 337 | 38.523 86.799 59.561 1.00 19.94 | C |
| ATOM | 9571 | NZ | LYS C 337 | 38.656 88.274 59.301 1.00 18.41 | N |
| ATOM | 9575 | C | LYS C 337 | 36.357 82.134 61.216 1.00 19.74 | C |
| ATOM | 9576 | O | LYS C 337 | 35.384 82.253 61.955 1.00 20.66 | O |
| ATOM | 9577 | N | ASP C 338 | 36.338 81.416 60.096 1.00 20.62 | N |
| ATOM | 9579 | CA | ASP C 338 | 35.166 80.655 59.694 1.00 21.06 | C |
| ATOM | 9581 | CB | ASP C 338 | 35.441 79.845 58.417 1.00 21.54 | C |
| ATOM | 9584 | CG | ASP C 338 | 35.236 80.662 57.153 1.00 22.69 | C |
| ATOM | 9585 | OD1 | ASP C 338 | 34.782 81.831 57.239 1.00 22.27 | O |
| ATOM | 9586 | OD2 | ASP C 338 | 35.506 80.207 56.024 1.00 25.63 | O |
| ATOM | 9587 | C | ASP C 338 | 34.737 79.721 60.793 1.00 20.84 | C |
| ATOM | 9588 | O | ASP C 338 | 33.544 79.586 61.030 1.00 21.08 | O |
| ATOM | 9589 | N | ASP C 339 | 35.707 79.097 61.461 1.00 20.65 | N |
| ATOM | 9591 | CA | ASP C 339 | 35.430 78.135 62.535 1.00 20.49 | C |
| ATOM | 9593 | CB | ASP C 339 | 36.723 77.485 63.041 1.00 19.99 | C |
| ATOM | 9596 | CG | ASP C 339 | 37.270 76.474 62.079 1.00 18.52 | C |
| ATOM | 9597 | OD1 | ASP C 339 | 36.475 75.796 61.393 1.00 15.97 | O |
| ATOM | 9598 | OD2 | ASP C 339 | 38.486 76.284 61.943 1.00 18.05 | O |
| ATOM | 9599 | C | ASP C 339 | 34.693 78.768 63.692 1.00 20.76 | C |
| ATOM | 9600 | O | ASP C 339 | 33.751 78.203 64.230 1.00 20.00 | O |
| ATOM | 9601 | N | PHE C 340 | 35.125 79.962 64.054 1.00 21.96 | N |
| ATOM | 9603 | CA | PHE C 340 | 34.440 80.719 65.076 1.00 22.95 | C |
| ATOM | 9605 | CB | PHE C 340 | 35.176 82.005 65.421 1.00 23.07 | C |
| ATOM | 9608 | CG | PHE C 340 | 36.399 81.828 66.277 1.00 22.95 | C |
| ATOM | 9609 | CD1 | PHE C 340 | 37.463 81.066 65.866 1.00 22.51 | C |
| ATOM | 9611 | CE1 | PHE C 340 | 38.588 80.952 66.633 1.00 22.57 | C |
| ATOM | 9613 | CZ | PHE C 340 | 38.682 81.605 67.807 1.00 23.78 | C |
| ATOM | 9615 | CE2 | PHE C 340 | 37.643 82.391 68.233 1.00 25.28 | C |
| ATOM | 9617 | CD2 | PHE C 340 | 36.512 82.509 67.463 1.00 24.52 | C |
| ATOM | 9619 | C | PHE C 340 | 33.045 81.064 64.569 1.00 23.67 | C |
| ATOM | 9620 | O | PHE C 340 | 32.085 80.943 65.309 1.00 23.60 | O |
| ATOM | 9621 | N | HIS C 341 | 32.926 81.492 63.317 1.00 24.91 | N |
| ATOM | 9623 | CA | HIS C 341 | 31.612 81.819 62.786 1.00 26.47 | C |
| ATOM | 9625 | CB | HIS C 341 | 31.638 82.334 61.337 1.00 26.86 | C |
| ATOM | 9628 | CG | HIS C 341 | 30.262 82.414 60.746 1.00 30.78 | C |
| ATOM | 9629 | ND1 | HIS C 341 | 29.302 83.287 61.224 1.00 33.90 | N |
| ATOM | 9631 | CE1 | HIS C 341 | 28.168 83.091 60.568 1.00 36.37 | C |
| ATOM | 9633 | NE2 | HIS C 341 | 28.347 82.102 59.702 1.00 36.36 | N |
| ATOM | 9635 | CD2 | HIS C 341 | 29.643 81.651 59.805 1.00 34.80 | C |
| ATOM | 9637 | C | HIS C 341 | 30.619 80.641 62.894 1.00 26.47 | C |
| ATOM | 9638 | O | HIS C 341 | 29.454 80.848 63.254 1.00 26.40 | O |
| ATOM | 9639 | N | ARG C 342 | 31.084 79.429 62.605 1.00 26.78 | N |
| ATOM | 9641 | CA | ARG C 342 | 30.240 78.241 62.639 1.00 27.49 | C |

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ATOM   9643 CB  ARG C 342    30.930 77.068 61.967 1.00 27.93       C
ATOM   9646 CG  ARG C 342    31.042 77.195 60.478 1.00 29.90       C
ATOM   9649 CD  ARG C 342    32.392 76.757 59.973 1.00 33.11       C
ATOM   9652 NE  ARG C 342    32.473 76.765 58.516 1.00 35.74       N
ATOM   9654 CZ  ARG C 342    33.545 76.392 57.827 1.00 37.80       C
ATOM   9655 NH1 ARG C 342    34.653 75.981 58.453 1.00 37.69       N
ATOM   9658 NH2 ARG C 342    33.509 76.426 56.499 1.00 39.32       N
ATOM   9661 C   ARG C 342    29.887 77.821 64.043 1.00 27.39       C
ATOM   9662 O   ARG C 342    28.925 77.116 64.239 1.00 28.16       O
ATOM   9663 N   ALA C 343    30.688 78.225 65.013 1.00 27.43       N
ATOM   9665 CA  ALA C 343    30.359 78.051 66.416 1.00 27.24       C
ATOM   9667 CB  ALA C 343    31.608 78.221 67.263 1.00 27.10       C
ATOM   9671 C   ALA C 343    29.286 79.029 66.882 1.00 27.37       C
ATOM   9672 O   ALA C 343    28.997 79.068 68.078 1.00 27.62       O
ATOM   9673 N   GLY C 344    28.704 79.802 65.951 1.00 27.38       N
ATOM   9675 CA  GLY C 344    27.653 80.784 66.234 1.00 27.23       C
ATOM   9678 C   GLY C 344    28.108 82.172 66.731 1.00 26.99       C
ATOM   9679 O   GLY C 344    27.284 82.969 67.222 1.00 26.63       O
ATOM   9680 N   LEU C 345    29.401 82.470 66.611 1.00 26.29       N
ATOM   9682 CA  LEU C 345    29.920 83.761 67.043 1.00 26.05       C
ATOM   9684 CB  LEU C 345    31.392 83.660 67.508 1.00 26.01       C
ATOM   9687 CG  LEU C 345    31.793 82.508 68.452 1.00 27.03       C
ATOM   9689 CD1 LEU C 345    32.888 82.915 69.392 1.00 27.83       C
ATOM   9693 CD2 LEU C 345    30.637 82.014 69.280 1.00 29.12       C
ATOM   9697 C   LEU C 345    29.740 84.821 65.945 1.00 25.74       C
ATOM   9698 O   LEU C 345    29.797 84.531 64.753 1.00 24.32       O
ATOM   9699 N   GLN C 346    29.483 86.043 66.412 1.00 26.61       N
ATOM   9701 CA  GLN C 346    29.309 87.257 65.615 1.00 27.29       C
ATOM   9703 CB  GLN C 346    28.979 88.441 66.520 1.00 27.75       C
ATOM   9706 CG  GLN C 346    27.667 88.453 67.274 1.00 30.06       C
ATOM   9709 CD  GLN C 346    27.621 89.629 68.287 1.00 32.70       C
ATOM   9710 OE1 GLN C 346    26.604 90.312 68.389 1.00 36.00       O
ATOM   9711 NE2 GLN C 346    28.725 89.863 69.011 1.00 30.49       N
ATOM   9714 C   GLN C 346    30.599 87.679 64.955 1.00 27.40       C
ATOM   9715 O   GLN C 346    31.678 87.520 65.522 1.00 28.47       O
ATOM   9716 N   VAL C 347    30.494 88.319 63.809 1.00 26.94       N
ATOM   9718 CA  VAL C 347    31.661 88.882 63.154 1.00 26.52       C
ATOM   9720 CB  VAL C 347    31.260 89.348 61.746 1.00 26.83       C
ATOM   9722 CG1 VAL C 347    30.781 90.818 61.735 1.00 27.09       C
ATOM   9726 CG2 VAL C 347    32.382 89.108 60.821 1.00 27.86       C
ATOM   9730 C   VAL C 347    32.316 90.021 63.968 1.00 25.70       C
ATOM   9731 O   VAL C 347    33.523 90.192 63.948 1.00 24.79       O
ATOM   9732 N   GLU C 348    31.500 90.766 64.707 1.00 25.23       N
ATOM   9734 CA  GLU C 348    31.941 91.910 65.508 1.00 25.25       C
ATOM   9736 CB  GLU C 348    30.718 92.610 66.148 1.00 26.27       C
ATOM   9739 CG  GLU C 348    29.820 93.435 65.231 1.00 29.33       C
ATOM   9742 CD  GLU C 348    28.795 92.623 64.439 1.00 34.78       C
ATOM   9743 OE1 GLU C 348    28.748 91.364 64.556 1.00 35.05       O
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ATOM   9744 OE2 GLU C 348    28.022 93.274 63.665 1.00 39.97        O
ATOM   9745 C   GLU C 348    32.873 91.503 66.655 1.00 23.99        C
ATOM   9746 O   GLU C 348    33.499 92.355 67.279 1.00 23.59        O
ATOM   9747 N   PHE C 349    32.880 90.212 66.989 1.00 22.63        N
ATOM   9749 CA  PHE C 349    33.822 89.626 67.948 1.00 21.44        C
ATOM   9751 CB  PHE C 349    33.093 88.619 68.816 1.00 21.89        C
ATOM   9754 CG  PHE C 349    33.898 88.062 69.936 1.00 22.89        C
ATOM   9755 CD1 PHE C 349    34.514 88.893 70.847 1.00 25.73        C
ATOM   9757 CE1 PHE C 349    35.239 88.354 71.906 1.00 27.78        C
ATOM   9759 CZ  PHE C 349    35.320 86.979 72.058 1.00 26.52        C
ATOM   9761 CE2 PHE C 349    34.697 86.156 71.156 1.00 25.03        C
ATOM   9763 CD2 PHE C 349    33.995 86.692 70.105 1.00 23.88        C
ATOM   9765 C   PHE C 349    34.934 88.910 67.215 1.00 20.23        C
ATOM   9766 O   PHE C 349    36.089 89.139 67.494 1.00 19.56        O
ATOM   9767 N   ILE C 350    34.587 88.073 66.244 1.00 18.88        N
ATOM   9769 CA  ILE C 350    35.588 87.275 65.555 1.00 18.34        C
ATOM   9771 CB  ILE C 350    34.919 86.374 64.501 1.00 18.48        C
ATOM   9773 CG1 ILE C 350    34.053 85.320 65.180 1.00 19.15        C
ATOM   9776 CD1 ILE C 350    32.929 84.839 64.286 1.00 20.67        C
ATOM   9780 CG2 ILE C 350    35.956 85.654 63.625 1.00 18.23        C
ATOM   9784 C   ILE C 350    36.697 88.127 64.918 1.00 18.02        C
ATOM   9785 O   ILE C 350    37.894 87.805 65.066 1.00 17.63        O
ATOM   9786 N   ASN C 351    36.313 89.203 64.216 1.00 17.31        N
ATOM   9788 CA  ASN C 351    37.284 89.993 63.470 1.00 16.76        C
ATOM   9790 CB  ASN C 351    36.634 90.970 62.471 1.00 16.58        C
ATOM   9793 CG  ASN C 351    36.193 90.299 61.157 1.00 15.21        C
ATOM   9794 OD1 ASN C 351    36.680 89.250 60.774 1.00 16.64        O
ATOM   9795 ND2 ASN C 351    35.265 90.923 60.478 1.00 12.76        N
ATOM   9798 C   ASN C 351    38.251 90.703 64.415 1.00 17.01        C
ATOM   9799 O   ASN C 351    39.428 90.591 64.211 1.00 17.64        O
ATOM   9800 N   PRO C 352    37.796 91.423 65.431 1.00 17.04        N
ATOM   9801 CA  PRO C 352    38.701 92.051 66.390 1.00 17.25        C
ATOM   9803 CB  PRO C 352    37.734 92.660 67.386 1.00 17.51        C
ATOM   9806 CG  PRO C 352    36.576 93.055 66.525 1.00 17.29        C
ATOM   9809 CD  PRO C 352    36.403 91.832 65.684 1.00 17.74        C
ATOM   9812 C   PRO C 352    39.662 91.131 67.120 1.00 17.55        C
ATOM   9813 O   PRO C 352    40.735 91.557 67.538 1.00 17.30        O
ATOM   9814 N   ILE C 353    39.280 89.878 67.285 1.00 17.86        N
ATOM   9816 CA  ILE C 353    40.121 88.908 67.973 1.00 18.08        C
ATOM   9818 CB  ILE C 353    39.344 87.642 68.260 1.00 18.73        C
ATOM   9820 CG1 ILE C 353    38.612 87.745 69.557 1.00 19.43        C
ATOM   9823 CD1 ILE C 353    37.650 86.617 69.621 1.00 22.63        C
ATOM   9827 CG2 ILE C 353    40.238 86.413 68.304 1.00 21.14        C
ATOM   9831 C   ILE C 353    41.223 88.565 67.044 1.00 17.44        C
ATOM   9832 O   ILE C 353    42.370 88.413 67.466 1.00 17.27        O
ATOM   9833 N   PHE C 354    40.863 88.377 65.775 1.00 17.04        N
ATOM   9835 CA  PHE C 354    41.870 88.096 64.776 1.00 16.79        C
ATOM   9837 CB  PHE C 354    41.295 87.430 63.524 1.00 16.89        C
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ATOM   9840  CG  PHE C 354    41.106  85.940  63.679  1.00  16.68        C
ATOM   9841  CD1 PHE C 354    40.077  85.443  64.458  1.00  16.83        C
ATOM   9843  CE1 PHE C 354    39.918  84.087  64.633  1.00  16.11        C
ATOM   9845  CZ  PHE C 354    40.796  83.218  64.047  1.00  15.19        C
ATOM   9847  CE2 PHE C 354    41.834  83.694  63.291  1.00  14.88        C
ATOM   9849  CD2 PHE C 354    41.987  85.045  63.107  1.00  15.98        C
ATOM   9851  C   PHE C 354    42.707  89.330  64.487  1.00  16.83        C
ATOM   9852  O   PHE C 354    43.882  89.151  64.281  1.00  16.91        O
ATOM   9853  N   GLU C 355    42.181  90.564  64.572  1.00  17.05        N
ATOM   9855  CA  GLU C 355    43.042  91.758  64.341  1.00  18.14        C
ATOM   9857  CB  GLU C 355    42.309  93.115  64.163  1.00  18.96        C
ATOM   9860  CG  GLU C 355    40.898  92.929  63.605  1.00  24.73        C
ATOM   9863  CD  GLU C 355    40.007  94.178  63.479  1.00  30.19        C
ATOM   9864  OE1 GLU C 355    38.932  94.030  62.795  1.00  29.35        O
ATOM   9865  OE2 GLU C 355    40.334  95.245  64.099  1.00  32.39        O
ATOM   9866  C   GLU C 355    44.081  91.842  65.437  1.00  17.35        C
ATOM   9867  O   GLU C 355    45.256  91.877  65.147  1.00  17.04        O
ATOM   9868  N   PHE C 356    43.641  91.846  66.684  1.00  17.06        N
ATOM   9870  CA  PHE C 356    44.525  91.801  67.843  1.00  16.82        C
ATOM   9872  CB  PHE C 356    43.693  91.488  69.083  1.00  17.28        C
ATOM   9875  CG  PHE C 356    44.468  91.485  70.374  1.00  16.78        C
ATOM   9876  CD1 PHE C 356    44.878  92.672  70.945  1.00  16.87        C
ATOM   9878  CE1 PHE C 356    45.563  92.700  72.131  1.00  17.87        C
ATOM   9880  CZ  PHE C 356    45.829  91.535  72.793  1.00  17.65        C
ATOM   9882  CE2 PHE C 356    45.414  90.332  72.251  1.00  18.63        C
ATOM   9884  CD2 PHE C 356    44.719  90.308  71.043  1.00  17.21        C
ATOM   9886  C   PHE C 356    45.573  90.722  67.714  1.00  17.34        C
ATOM   9887  O   PHE C 356    46.736  90.927  68.092  1.00  17.16        O
ATOM   9888  N   SER C 357    45.174  89.556  67.203  1.00  17.18        N
ATOM   9890  CA  SER C 357    46.108  88.439  67.136  1.00  17.38        C
ATOM   9892  CB  SER C 357    45.381  87.133  66.813  1.00  17.76        C
ATOM   9895  OG  SER C 357    44.418  86.873  67.825  1.00  18.50        O
ATOM   9897  C   SER C 357    47.236  88.737  66.152  1.00  16.38        C
ATOM   9898  O   SER C 357    48.396  88.587  66.474  1.00  15.52        O
ATOM   9899  N   ARG C 358    46.857  89.200  64.978  1.00  16.04        N
ATOM   9901  CA  ARG C 358    47.785  89.681  63.961  1.00  16.53        C
ATOM   9903  CB  ARG C 358    46.990  90.176  62.736  1.00  16.22        C
ATOM   9906  CG  ARG C 358    46.325  89.101  61.928  1.00  14.87        C
ATOM   9909  CD  ARG C 358    45.937  89.541  60.556  1.00  13.61        C
ATOM   9912  NE  ARG C 358    44.956  90.614  60.583  1.00  12.04        N
ATOM   9914  CZ  ARG C 358    43.667  90.450  60.802  1.00  11.62        C
ATOM   9915  NH1 ARG C 358    43.133  89.263  61.004  1.00  11.73        N
ATOM   9918  NH2 ARG C 358    42.890  91.500  60.809  1.00  13.12        N
ATOM   9921  C   ARG C 358    48.709  90.832  64.418  1.00  16.96        C
ATOM   9922  O   ARG C 358    49.835  90.921  63.974  1.00  16.47        O
ATOM   9923  N   ALA C 359    48.188  91.723  65.256  1.00  17.76        N
ATOM   9925  CA  ALA C 359    48.885  92.902  65.732  1.00  18.41        C
ATOM   9927  CB  ALA C 359    47.897  93.908  66.291  1.00  18.54        C
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ATOM   9931 C   ALA C 359   49.861 92.495 66.803 1.00 19.75   C
ATOM   9932 O   ALA C 359   51.016 92.878 66.741 1.00 20.24   O
ATOM   9933 N   MET C 360   49.414 91.722 67.796 1.00 20.82   N
ATOM   9935 CA  MET C 360   50.349 91.113 68.733 1.00 21.74   C
ATOM   9937 CB  MET C 360   49.652 90.151 69.684 1.00 21.72   C
ATOM   9940 CG  MET C 360   48.761 90.800 70.719 1.00 22.69   C
ATOM   9943 SD  MET C 360   49.549 91.976 71.785 1.00 21.63   S
ATOM   9944 CE  MET C 360   50.525 90.934 72.758 1.00 23.43   C
ATOM   9948 C   MET C 360   51.503 90.375 68.024 1.00 22.40   C
ATOM   9949 O   MET C 360   52.625 90.480 68.456 1.00 22.90   O
ATOM   9950 N   ARG C 361   51.250 89.631 66.958 1.00 23.53   N
ATOM   9952 CA  ARG C 361   52.334 88.893 66.281 1.00 24.93   C
ATOM   9954 CB  ARG C 361   51.782 88.118 65.070 1.00 25.30   C
ATOM   9957 CG  ARG C 361   52.811 87.720 64.015 1.00 27.27   C
ATOM   9960 CD  ARG C 361   52.259 87.610 62.597 1.00 30.11   C
ATOM   9963 NE  ARG C 361   53.023 86.632 61.823 1.00 32.45   N
ATOM   9965 CZ  ARG C 361   53.432 86.776 60.556 1.00 35.21   C
ATOM   9966 NH1 ARG C 361   53.171 87.887 59.847 1.00 35.66   N
ATOM   9969 NH2 ARG C 361   54.118 85.778 59.985 1.00 35.46   N
ATOM   9972 C   ARG C 361   53.459 89.842 65.846 1.00 25.31   C
ATOM   9973 O   ARG C 361   54.644 89.539 65.988 1.00 24.75   O
ATOM   9974 N   ARG C 362   53.021 90.985 65.315 1.00 26.30   N
ATOM   9976 CA  ARG C 362   53.817 92.131 64.879 1.00 26.81   C
ATOM   9978 CB  ARG C 362   52.835 93.250 64.461 1.00 27.31   C
ATOM   9981 CG  ARG C 362   53.313 94.320 63.491 1.00 29.92   C
ATOM   9984 CD  ARG C 362   52.162 95.097 62.825 1.00 31.82   C
ATOM   9987 NE  ARG C 362   51.356 94.189 62.005 1.00 32.00   N
ATOM   9989 CZ  ARG C 362   50.031 94.021 62.092 1.00 33.06   C
ATOM   9990 NH1 ARG C 362   49.277 94.722 62.947 1.00 31.56   N
ATOM   9993 NH2 ARG C 362   49.446 93.131 61.293 1.00 34.15   N
ATOM   9996 C   ARG C 362   54.720 92.635 65.999 1.00 26.45   C
ATOM   9997 O   ARG C 362   55.840 93.010 65.775 1.00 26.56   O
ATOM   9998 N   LEU C 363   54.221 92.679 67.212 1.00 26.40   N
ATOM  10000 CA  LEU C 363   55.085 93.001 68.330 1.00 26.69   C
ATOM  10002 CB  LEU C 363   54.244 93.218 69.584 1.00 26.96   C
ATOM  10005 CG  LEU C 363   53.737 94.633 69.743 1.00 28.33   C
ATOM  10007 CD1 LEU C 363   52.958 94.712 71.029 1.00 28.19   C
ATOM  10011 CD2 LEU C 363   54.916 95.635 69.719 1.00 29.47   C
ATOM  10015 C   LEU C 363   56.171 91.946 68.615 1.00 26.28   C
ATOM  10016 O   LEU C 363   57.261 92.298 69.013 1.00 25.96   O
ATOM  10017 N   GLY C 364   55.855 90.663 68.465 1.00 26.11   N
ATOM  10019 CA  GLY C 364   56.816 89.605 68.701 1.00 26.12   C
ATOM  10022 C   GLY C 364   57.326 89.551 70.130 1.00 26.28   C
ATOM  10023 O   GLY C 364   58.530 89.636 70.369 1.00 26.55   O
ATOM  10024 N   LEU C 365   56.419 89.412 71.090 1.00 26.35   N
ATOM  10026 CA  LEU C 365   56.828 89.262 72.474 1.00 26.62   C
ATOM  10028 CB  LEU C 365   55.649 89.451 73.420 1.00 26.84   C
ATOM  10031 CG  LEU C 365   54.705 90.642 73.256 1.00 28.48   C
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| ATOM | 10033 | CD1 | LEU | C | 365 | 53.735 | 90.730 | 74.471 | 1.00 | 29.09 | C |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 10037 | CD2 | LEU | C | 365 | 55.479 | 91.922 | 73.108 | 1.00 | 29.85 | C |
| ATOM | 10041 | C | LEU | C | 365 | 57.441 | 87.880 | 72.699 | 1.00 | 26.50 | C |
| ATOM | 10042 | O | LEU | C | 365 | 56.984 | 86.880 | 72.121 | 1.00 | 27.02 | O |
| ATOM | 10043 | N | ASP | C | 366 | 58.484 | 87.833 | 73.522 | 1.00 | 25.82 | N |
| ATOM | 10045 | CA | ASP | C | 366 | 59.014 | 86.572 | 74.008 | 1.00 | 25.54 | C |
| ATOM | 10047 | CB | ASP | C | 366 | 60.530 | 86.662 | 74.223 | 1.00 | 25.31 | C |
| ATOM | 10050 | CG | ASP | C | 366 | 60.932 | 87.699 | 75.278 | 1.00 | 25.54 | C |
| ATOM | 10051 | OD1 | ASP | C | 366 | 60.092 | 88.049 | 76.140 | 1.00 | 27.00 | O |
| ATOM | 10052 | OD2 | ASP | C | 366 | 62.074 | 88.213 | 75.336 | 1.00 | 23.90 | O |
| ATOM | 10053 | C | ASP | C | 366 | 58.266 | 86.177 | 75.305 | 1.00 | 25.67 | C |
| ATOM | 10054 | O | ASP | C | 366 | 57.461 | 86.968 | 75.843 | 1.00 | 25.93 | O |
| ATOM | 10055 | N | ASP | C | 367 | 58.536 | 84.955 | 75.781 | 1.00 | 25.06 | N |
| ATOM | 10057 | CA | ASP | C | 367 | 57.934 | 84.386 | 77.001 | 1.00 | 24.68 | C |
| ATOM | 10059 | CB | ASP | C | 367 | 58.724 | 83.136 | 77.423 | 1.00 | 25.13 | C |
| ATOM | 10062 | CG | ASP | C | 367 | 58.631 | 81.996 | 76.418 | 1.00 | 26.28 | C |
| ATOM | 10063 | OD1 | ASP | C | 367 | 57.765 | 82.047 | 75.514 | 1.00 | 25.81 | O |
| ATOM | 10064 | OD2 | ASP | C | 367 | 59.406 | 81.004 | 76.474 | 1.00 | 28.52 | O |
| ATOM | 10065 | C | ASP | C | 367 | 57.883 | 85.320 | 78.229 | 1.00 | 24.10 | C |
| ATOM | 10066 | O | ASP | C | 367 | 56.903 | 85.306 | 79.024 | 1.00 | 22.49 | O |
| ATOM | 10067 | N | ALA | C | 368 | 58.984 | 86.075 | 78.387 | 1.00 | 23.55 | N |
| ATOM | 10069 | CA | ALA | C | 368 | 59.213 | 86.954 | 79.536 | 1.00 | 22.91 | C |
| ATOM | 10071 | CB | ALA | C | 368 | 60.619 | 87.492 | 79.502 | 1.00 | 23.06 | C |
| ATOM | 10075 | C | ALA | C | 368 | 58.231 | 88.094 | 79.517 | 1.00 | 22.31 | C |
| ATOM | 10076 | O | ALA | C | 368 | 57.646 | 88.446 | 80.546 | 1.00 | 22.06 | O |
| ATOM | 10077 | N | GLU | C | 369 | 58.051 | 88.643 | 78.316 | 1.00 | 21.69 | N |
| ATOM | 10079 | CA | GLU | C | 369 | 57.169 | 89.791 | 78.096 | 1.00 | 20.97 | C |
| ATOM | 10081 | CB | GLU | C | 369 | 57.463 | 90.435 | 76.731 | 1.00 | 20.89 | C |
| ATOM | 10084 | CG | GLU | C | 369 | 58.738 | 91.284 | 76.722 | 1.00 | 18.99 | C |
| ATOM | 10087 | CD | GLU | C | 369 | 59.372 | 91.484 | 75.342 | 1.00 | 17.52 | C |
| ATOM | 10088 | OE1 | GLU | C | 369 | 60.058 | 92.511 | 75.180 | 1.00 | 16.47 | O |
| ATOM | 10089 | OE2 | GLU | C | 369 | 59.221 | 90.641 | 74.421 | 1.00 | 16.36 | O |
| ATOM | 10090 | C | GLU | C | 369 | 55.698 | 89.409 | 78.238 | 1.00 | 20.50 | C |
| ATOM | 10091 | O | GLU | C | 369 | 54.925 | 90.171 | 78.803 | 1.00 | 20.24 | O |
| ATOM | 10092 | N | TYR | C | 370 | 55.320 | 88.232 | 77.760 | 1.00 | 19.94 | N |
| ATOM | 10094 | CA | TYR | C | 370 | 53.942 | 87.832 | 77.870 | 1.00 | 20.41 | C |
| ATOM | 10096 | CB | TYR | C | 370 | 53.689 | 86.539 | 77.102 | 1.00 | 20.54 | C |
| ATOM | 10099 | CG | TYR | C | 370 | 53.051 | 86.728 | 75.727 | 1.00 | 22.11 | C |
| ATOM | 10100 | CD1 | TYR | C | 370 | 53.750 | 86.401 | 74.574 | 1.00 | 23.49 | C |
| ATOM | 10102 | CE1 | TYR | C | 370 | 53.197 | 86.553 | 73.337 | 1.00 | 23.37 | C |
| ATOM | 10104 | CZ | TYR | C | 370 | 51.936 | 87.044 | 73.198 | 1.00 | 23.38 | C |
| ATOM | 10105 | OH | TYR | C | 370 | 51.445 | 87.167 | 71.918 | 1.00 | 25.78 | O |
| ATOM | 10107 | CE2 | TYR | C | 370 | 51.198 | 87.377 | 74.308 | 1.00 | 23.16 | C |
| ATOM | 10109 | CD2 | TYR | C | 370 | 51.758 | 87.211 | 75.578 | 1.00 | 22.69 | C |
| ATOM | 10111 | C | TYR | C | 370 | 53.567 | 87.675 | 79.349 | 1.00 | 20.55 | C |
| ATOM | 10112 | O | TYR | C | 370 | 52.550 | 88.157 | 79.804 | 1.00 | 20.68 | O |
| ATOM | 10113 | N | ALA | C | 371 | 54.424 | 87.028 | 80.115 | 1.00 | 21.01 | N |
| ATOM | 10115 | CA | ALA | C | 371 | 54.104 | 86.692 | 81.498 | 1.00 | 20.71 | C |

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ATOM 10117 CB  ALA C 371   55.123 85.737 82.021 1.00 21.09      C
ATOM 10121 C   ALA C 371   54.044 87.915 82.379 1.00 20.62      C
ATOM 10122 O   ALA C 371   53.217 88.003 83.295 1.00 19.75      O
ATOM 10123 N   LEU C 372   54.937 88.851 82.080 1.00 20.82      N
ATOM 10125 CA  LEU C 372   54.943 90.156 82.734 1.00 21.23      C
ATOM 10127 CB  LEU C 372   56.238 90.934 82.400 1.00 21.20      C
ATOM 10130 CG  LEU C 372   57.489 90.444 83.168 1.00 21.11      C
ATOM 10132 CD1 LEU C 372   58.749 91.065 82.616 1.00 20.65      C
ATOM 10136 CD2 LEU C 372   57.347 90.751 84.655 1.00 20.82      C
ATOM 10140 C   LEU C 372   53.693 90.993 82.402 1.00 21.30      C
ATOM 10141 O   LEU C 372   53.125 91.653 83.290 1.00 21.12      O
ATOM 10142 N   LEU C 373   53.262 90.965 81.144 1.00 21.20      N
ATOM 10144 CA  LEU C 373   52.045 91.684 80.741 1.00 21.46      C
ATOM 10146 CB  LEU C 373   51.852 91.625 79.227 1.00 22.26      C
ATOM 10149 CG  LEU C 373   51.785 92.881 78.364 1.00 23.82      C
ATOM 10151 CD1 LEU C 373   51.079 92.498 77.110 1.00 26.07      C
ATOM 10155 CD2 LEU C 373   51.069 94.022 79.018 1.00 25.10      C
ATOM 10159 C   LEU C 373   50.810 91.068 81.405 1.00 20.82      C
ATOM 10160 O   LEU C 373   49.889 91.782 81.801 1.00 20.56      O
ATOM 10161 N   ILE C 374   50.804 89.741 81.538 1.00 20.35      N
ATOM 10163 CA  ILE C 374   49.712 89.038 82.215 1.00 19.83      C
ATOM 10165 CB  ILE C 374   49.837 87.504 82.026 1.00 19.67      C
ATOM 10167 CG1 ILE C 374   49.609 87.124 80.570 1.00 18.25      C
ATOM 10170 CD1 ILE C 374   50.070 85.805 80.239 1.00 17.91      C
ATOM 10174 CG2 ILE C 374   48.820 86.773 82.904 1.00 20.58      C
ATOM 10178 C   ILE C 374   49.641 89.416 83.704 1.00 19.80      C
ATOM 10179 O   ILE C 374   48.561 89.638 84.248 1.00 19.27      O
ATOM 10180 N   ALA C 375   50.800 89.498 84.342 1.00 20.09      N
ATOM 10182 CA  ALA C 375   50.885 89.850 85.749 1.00 20.49      C
ATOM 10184 CB  ALA C 375   52.297 89.660 86.256 1.00 20.40      C
ATOM 10188 C   ALA C 375   50.462 91.287 85.940 1.00 21.01      C
ATOM 10189 O   ALA C 375   49.738 91.621 86.880 1.00 21.55      O
ATOM 10190 N   ILE C 376   50.914 92.155 85.054 1.00 21.25      N
ATOM 10192 CA  ILE C 376   50.487 93.540 85.147 1.00 21.75      C
ATOM 10194 CB  ILE C 376   51.120 94.397 84.049 1.00 22.02      C
ATOM 10196 CG1 ILE C 376   52.633 94.584 84.325 1.00 22.83      C
ATOM 10199 CD1 ILE C 376   53.499 95.020 83.102 1.00 22.97      C
ATOM 10203 CG2 ILE C 376   50.356 95.720 83.927 1.00 21.74      C
ATOM 10207 C   ILE C 376   48.977 93.573 85.021 1.00 22.03      C
ATOM 10208 O   ILE C 376   48.306 94.274 85.780 1.00 22.24      O
ATOM 10209 N   ASN C 377   48.462 92.805 84.053 1.00 22.18      N
ATOM 10211 CA  ASN C 377   47.049 92.807 83.717 1.00 22.16      C
ATOM 10213 CB  ASN C 377   46.792 91.894 82.512 1.00 22.34      C
ATOM 10216 CG  ASN C 377   45.340 91.928 82.053 1.00 23.24      C
ATOM 10217 OD1 ASN C 377   44.487 91.235 82.624 1.00 25.25      O
ATOM 10218 ND2 ASN C 377   45.048 92.740 81.042 1.00 21.97      N
ATOM 10221 C   ASN C 377   46.193 92.391 84.924 1.00 21.96      C
ATOM 10222 O   ASN C 377   45.222 93.060 85.282 1.00 21.34      O
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ATOM  10223 N   ILE C 378   46.581 91.282 85.551 1.00 22.24        N
ATOM  10225 CA  ILE C 378   45.945 90.795 86.806 1.00 21.86        C
ATOM  10227 CB  ILE C 378   46.760 89.582 87.339 1.00 21.27        C
ATOM  10229 CG1 ILE C 378   46.488 88.360 86.454 1.00 20.50        C
ATOM  10232 CD1 ILE C 378   47.527 87.185 86.593 1.00 21.01        C
ATOM  10236 CG2 ILE C 378   46.412 89.292 88.780 1.00 21.94        C
ATOM  10240 C   ILE C 378   45.770 91.897 87.897 1.00 21.49        C
ATOM  10241 O   ILE C 378   44.687 92.096 88.433 1.00 19.66        O
ATOM  10242 N   PHE C 379   46.860 92.611 88.162 1.00 22.23        N
ATOM  10244 CA  PHE C 379   46.946 93.623 89.217 1.00 22.96        C
ATOM  10246 CB  PHE C 379   48.369 93.663 89.813 1.00 22.66        C
ATOM  10249 CG  PHE C 379   48.767 92.406 90.526 1.00 22.91        C
ATOM  10250 CD1 PHE C 379   49.961 91.762 90.210 1.00 22.67        C
ATOM  10252 CE1 PHE C 379   50.334 90.610 90.874 1.00 21.01        C
ATOM  10254 CZ  PHE C 379   49.506 90.083 91.868 1.00 21.68        C
ATOM  10256 CE2 PHE C 379   48.324 90.701 92.207 1.00 21.90        C
ATOM  10258 CD2 PHE C 379   47.953 91.864 91.533 1.00 24.00        C
ATOM  10260 C   PHE C 379   46.527 95.021 88.751 1.00 23.26        C
ATOM  10261 O   PHE C 379   47.210 95.997 88.972 1.00 22.51        O
ATOM  10262 N   SER C 380   45.364 95.107 88.137 1.00 24.39        N
ATOM  10264 CA  SER C 380   44.842 96.390 87.709 1.00 25.22        C
ATOM  10266 CB  SER C 380   44.295 96.277 86.279 1.00 25.20        C
ATOM  10269 OG  SER C 380   45.187 95.547 85.453 1.00 23.22        O
ATOM  10271 C   SER C 380   43.799 96.848 88.742 1.00 25.91        C
ATOM  10272 O   SER C 380   42.695 96.299 88.849 1.00 24.92        O
ATOM  10273 N   ALA C 381   44.185 97.873 89.497 1.00 27.23        N
ATOM  10275 CA  ALA C 381   43.428 98.348 90.671 1.00 28.01        C
ATOM  10277 CB  ALA C 381   44.244 99.402 91.448 1.00 27.35        C
ATOM  10281 C   ALA C 381   42.017 98.888 90.350 1.00 28.78        C
ATOM  10282 O   ALA C 381   41.168 98.986 91.254 1.00 29.19        O
ATOM  10283 N   ASP C 382   41.776 99.215 89.077 1.00 29.16        N
ATOM  10285 CA  ASP C 382   40.508 99.807 88.639 1.00 29.25        C
ATOM  10287 CB  ASP C 382   40.801 100.771 87.516 1.00 29.43       C
ATOM  10290 CG  ASP C 382   41.288 100.069 86.275 1.00 31.79       C
ATOM  10291 OD1 ASP C 382   41.958 98.995 86.392 1.00 30.62        O
ATOM  10292 OD2 ASP C 382   41.037 100.543 85.138 1.00 35.14       O
ATOM  10293 C   ASP C 382   39.430 98.812 88.170 1.00 28.95        C
ATOM  10294 O   ASP C 382   38.468 99.183 87.501 1.00 28.93        O
ATOM  10295 N   ARG C 383   39.564 97.544 88.525 1.00 28.77        N
ATOM  10297 CA  ARG C 383   38.525 96.593 88.169 1.00 28.43        C
ATOM  10299 CB  ARG C 383   39.021 95.163 88.360 1.00 28.28        C
ATOM  10302 CG  ARG C 383   40.236 94.829 87.593 1.00 26.97        C
ATOM  10305 CD  ARG C 383   40.026 94.899 86.117 1.00 26.28        C
ATOM  10308 NE  ARG C 383   41.162 94.299 85.408 1.00 24.87        N
ATOM  10310 CZ  ARG C 383   41.202 94.092 84.110 1.00 21.15        C
ATOM  10311 NH1 ARG C 383   40.168 94.424 83.354 1.00 19.43        N
ATOM  10314 NH2 ARG C 383   42.283 93.552 83.578 1.00 20.52        N
ATOM  10317 C   ARG C 383   37.252 96.827 89.010 1.00 28.42        C
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| ATOM | 10318 | O | ARG C 383 | 37.314 | 97.405 | 90.078 | 1.00 | 27.50 | O |
|---|---|---|---|---|---|---|---|---|---|
| ATOM | 10319 | N | PRO C 384 | 36.110 | 96.366 | 88.514 | 1.00 | 28.96 | N |
| ATOM | 10320 | CA | PRO C 384 | 34.869 | 96.341 | 89.284 | 1.00 | 29.32 | C |
| ATOM | 10322 | CB | PRO C 384 | 33.891 | 95.616 | 88.352 | 1.00 | 29.56 | C |
| ATOM | 10325 | CG | PRO C 384 | 34.465 | 95.725 | 86.996 | 1.00 | 29.51 | C |
| ATOM | 10328 | CD | PRO C 384 | 35.923 | 95.836 | 87.151 | 1.00 | 29.25 | C |
| ATOM | 10331 | C | PRO C 384 | 34.970 | 95.550 | 90.589 | 1.00 | 29.67 | C |
| ATOM | 10332 | O | PRO C 384 | 35.455 | 94.404 | 90.550 | 1.00 | 30.34 | O |
| ATOM | 10333 | N | ASN C 385 | 34.516 | 96.172 | 91.693 | 1.00 | 29.15 | N |
| ATOM | 10335 | CA | ASN C 385 | 34.335 | 95.560 | 93.008 | 1.00 | 28.59 | C |
| ATOM | 10337 | CB | ASN C 385 | 33.388 | 94.351 | 92.926 | 1.00 | 28.55 | C |
| ATOM | 10340 | CG | ASN C 385 | 32.101 | 94.679 | 92.205 | 1.00 | 28.72 | C |
| ATOM | 10341 | OD1 | ASN C 385 | 31.364 | 95.552 | 92.631 | 1.00 | 30.01 | O |
| ATOM | 10342 | ND2 | ASN C 385 | 31.839 | 94.004 | 91.098 | 1.00 | 28.47 | N |
| ATOM | 10345 | C | ASN C 385 | 35.616 | 95.178 | 93.716 | 1.00 | 28.24 | C |
| ATOM | 10346 | O | ASN C 385 | 35.589 | 94.337 | 94.610 | 1.00 | 28.84 | O |
| ATOM | 10347 | N | VAL C 386 | 36.733 | 95.785 | 93.331 | 1.00 | 27.80 | N |
| ATOM | 10349 | CA | VAL C 386 | 37.980 | 95.611 | 94.069 | 1.00 | 27.70 | C |
| ATOM | 10351 | CB | VAL C 386 | 39.226 | 96.083 | 93.300 | 1.00 | 27.91 | C |
| ATOM | 10353 | CG1 | VAL C 386 | 40.443 | 95.981 | 94.190 | 1.00 | 28.89 | C |
| ATOM | 10357 | CG2 | VAL C 386 | 39.447 | 95.278 | 92.003 | 1.00 | 28.00 | C |
| ATOM | 10361 | C | VAL C 386 | 37.872 | 96.449 | 95.328 | 1.00 | 27.72 | C |
| ATOM | 10362 | O | VAL C 386 | 37.396 | 97.584 | 95.304 | 1.00 | 27.40 | O |
| ATOM | 10363 | N | GLN C 387 | 38.330 | 95.875 | 96.431 | 1.00 | 27.89 | N |
| ATOM | 10365 | CA | GLN C 387 | 38.069 | 96.393 | 97.763 | 1.00 | 27.47 | C |
| ATOM | 10367 | CB | GLN C 387 | 37.478 | 95.290 | 98.628 | 1.00 | 27.46 | C |
| ATOM | 10370 | CG | GLN C 387 | 36.271 | 94.618 | 98.004 | 1.00 | 29.01 | C |
| ATOM | 10373 | CD | GLN C 387 | 35.066 | 94.649 | 98.896 | 1.00 | 31.95 | C |
| ATOM | 10374 | OE1 | GLN C 387 | 34.297 | 95.612 | 98.873 | 1.00 | 34.44 | O |
| ATOM | 10375 | NE2 | GLN C 387 | 34.891 | 93.599 | 99.695 | 1.00 | 32.89 | N |
| ATOM | 10378 | C | GLN C 387 | 39.330 | 96.927 | 98.396 | 1.00 | 27.04 | C |
| ATOM | 10379 | O | GLN C 387 | 39.263 | 97.511 | 99.459 | 1.00 | 27.19 | O |
| ATOM | 10380 | N | GLU C 388 | 40.480 | 96.737 | 97.751 | 1.00 | 26.75 | N |
| ATOM | 10382 | CA | GLU C 388 | 41.737 | 97.323 | 98.223 | 1.00 | 26.26 | C |
| ATOM | 10384 | CB | GLU C 388 | 42.506 | 96.319 | 99.077 | 1.00 | 26.27 | C |
| ATOM | 10387 | CG | GLU C 388 | 41.810 | 95.953 | 100.373 | 1.00 | 25.93 | C |
| ATOM | 10390 | CD | GLU C 388 | 42.769 | 95.473 | 101.452 | 1.00 | 26.32 | C |
| ATOM | 10391 | OE1 | GLU C 388 | 43.187 | 94.301 | 101.395 | 1.00 | 23.97 | O |
| ATOM | 10392 | OE2 | GLU C 388 | 43.087 | 96.272 | 102.373 | 1.00 | 29.05 | O |
| ATOM | 10393 | C | GLU C 388 | 42.595 | 97.784 | 97.043 | 1.00 | 25.86 | C |
| ATOM | 10394 | O | GLU C 388 | 43.712 | 97.281 | 96.851 | 1.00 | 25.49 | O |
| ATOM | 10395 | N | PRO C 389 | 42.083 | 98.755 | 96.271 | 1.00 | 25.44 | N |
| ATOM | 10396 | CA | PRO C 389 | 42.768 | 99.211 | 95.049 | 1.00 | 24.67 | C |
| ATOM | 10398 | CB | PRO C 389 | 41.909 | 100.380 | 94.546 | 1.00 | 24.61 | C |
| ATOM | 10401 | CG | PRO C 389 | 40.898 | 100.661 | 95.599 | 1.00 | 24.99 | C |
| ATOM | 10404 | CD | PRO C 389 | 40.829 | 99.497 | 96.521 | 1.00 | 25.33 | C |
| ATOM | 10407 | C | PRO C 389 | 44.194 | 99.649 | 95.335 | 1.00 | 24.23 | C |
| ATOM | 10408 | O | PRO C 389 | 45.083 | 99.271 | 94.569 | 1.00 | 23.99 | O |

| ATOM | 10409 | N | GLY | C | 390 | 44.404 | 100.414 | 96.412 | 1.00 | 23.99 | N |
| ATOM | 10411 | CA | GLY | C | 390 | 45.739 | 100.826 | 96.831 | 1.00 | 23.80 | C |
| ATOM | 10414 | C | GLY | C | 390 | 46.722 | 99.671 | 96.832 | 1.00 | 24.09 | C |
| ATOM | 10415 | O | GLY | C | 390 | 47.796 | 99.753 | 96.246 | 1.00 | 23.75 | O |
| ATOM | 10416 | N | ARG | C | 391 | 46.337 | 98.576 | 97.478 | 1.00 | 24.84 | N |
| ATOM | 10418 | CA | ARG | C | 391 | 47.178 | 97.384 | 97.546 | 1.00 | 25.72 | C |
| ATOM | 10420 | CB | ARG | C | 391 | 46.579 | 96.341 | 98.490 | 1.00 | 26.51 | C |
| ATOM | 10423 | CG | ARG | C | 391 | 46.949 | 96.591 | 99.959 | 1.00 | 30.17 | C |
| ATOM | 10426 | CD | ARG | C | 391 | 47.538 | 95.369 | 100.659 | 1.00 | 34.52 | C |
| ATOM | 10429 | NE | ARG | C | 391 | 46.495 | 94.388 | 100.953 | 1.00 | 36.68 | N |
| ATOM | 10431 | CZ | ARG | C | 391 | 46.659 | 93.070 | 100.918 | 1.00 | 39.33 | C |
| ATOM | 10432 | NH1 | ARG | C | 391 | 47.843 | 92.531 | 100.612 | 1.00 | 40.62 | N |
| ATOM | 10435 | NH2 | ARG | C | 391 | 45.626 | 92.278 | 101.197 | 1.00 | 40.10 | N |
| ATOM | 10438 | C | ARG | C | 391 | 47.426 | 96.753 | 96.193 | 1.00 | 25.25 | C |
| ATOM | 10439 | O | ARG | C | 391 | 48.568 | 96.446 | 95.869 | 1.00 | 25.05 | O |
| ATOM | 10440 | N | VAL | C | 392 | 46.365 | 96.555 | 95.411 | 1.00 | 24.85 | N |
| ATOM | 10442 | CA | VAL | C | 392 | 46.504 | 96.044 | 94.045 | 1.00 | 24.75 | C |
| ATOM | 10444 | CB | VAL | C | 392 | 45.171 | 96.105 | 93.285 | 1.00 | 24.27 | C |
| ATOM | 10446 | CG1 | VAL | C | 392 | 45.376 | 95.817 | 91.806 | 1.00 | 23.35 | C |
| ATOM | 10450 | CG2 | VAL | C | 392 | 44.176 | 95.114 | 93.893 | 1.00 | 24.67 | C |
| ATOM | 10454 | C | VAL | C | 392 | 47.594 | 96.800 | 93.260 | 1.00 | 25.28 | C |
| ATOM | 10455 | O | VAL | C | 392 | 48.486 | 96.195 | 92.641 | 1.00 | 25.15 | O |
| ATOM | 10456 | N | GLU | C | 393 | 47.527 | 98.126 | 93.315 | 1.00 | 25.77 | N |
| ATOM | 10458 | CA | GLU | C | 393 | 48.458 | 98.997 | 92.592 | 1.00 | 26.33 | C |
| ATOM | 10460 | CB | GLU | C | 393 | 48.068 | 100.462 | 92.839 | 1.00 | 26.81 | C |
| ATOM | 10463 | CG | GLU | C | 393 | 47.907 | 101.265 | 91.580 | 1.00 | 29.12 | C |
| ATOM | 10466 | CD | GLU | C | 393 | 48.204 | 102.719 | 91.801 | 1.00 | 32.89 | C |
| ATOM | 10467 | OE1 | GLU | C | 393 | 47.824 | 103.217 | 92.887 | 1.00 | 36.07 | O |
| ATOM | 10468 | OE2 | GLU | C | 393 | 48.817 | 103.341 | 90.893 | 1.00 | 34.16 | O |
| ATOM | 10469 | C | GLU | C | 393 | 49.938 | 98.785 | 92.989 | 1.00 | 25.88 | C |
| ATOM | 10470 | O | GLU | C | 393 | 50.835 | 98.834 | 92.132 | 1.00 | 25.58 | O |
| ATOM | 10471 | N | ALA | C | 394 | 50.182 | 98.589 | 94.288 | 1.00 | 25.36 | N |
| ATOM | 10473 | CA | ALA | C | 394 | 51.535 | 98.356 | 94.792 | 1.00 | 25.26 | C |
| ATOM | 10475 | CB | ALA | C | 394 | 51.568 | 98.419 | 96.330 | 1.00 | 24.81 | C |
| ATOM | 10479 | C | ALA | C | 394 | 52.046 | 97.003 | 94.272 | 1.00 | 25.40 | C |
| ATOM | 10480 | O | ALA | C | 394 | 53.207 | 96.873 | 93.849 | 1.00 | 25.34 | O |
| ATOM | 10481 | N | LEU | C | 395 | 51.152 | 96.011 | 94.270 | 1.00 | 25.29 | N |
| ATOM | 10483 | CA | LEU | C | 395 | 51.459 | 94.696 | 93.742 | 1.00 | 25.18 | C |
| ATOM | 10485 | CB | LEU | C | 395 | 50.328 | 93.728 | 94.052 | 1.00 | 25.30 | C |
| ATOM | 10488 | CG | LEU | C | 395 | 50.153 | 93.445 | 95.542 | 1.00 | 25.72 | C |
| ATOM | 10490 | CD1 | LEU | C | 395 | 48.907 | 92.617 | 95.773 | 1.00 | 26.08 | C |
| ATOM | 10494 | CD2 | LEU | C | 395 | 51.375 | 92.737 | 96.087 | 1.00 | 26.34 | C |
| ATOM | 10498 | C | LEU | C | 395 | 51.724 | 94.739 | 92.241 | 1.00 | 25.03 | C |
| ATOM | 10499 | O | LEU | C | 395 | 52.545 | 93.964 | 91.744 | 1.00 | 25.02 | O |
| ATOM | 10500 | N | GLN | C | 396 | 51.076 | 95.663 | 91.525 | 1.00 | 24.61 | N |
| ATOM | 10502 | CA | GLN | C | 396 | 51.314 | 95.794 | 90.085 | 1.00 | 24.35 | C |
| ATOM | 10504 | CB | GLN | C | 396 | 50.236 | 96.645 | 89.422 | 1.00 | 24.23 | C |
| ATOM | 10507 | CG | GLN | C | 396 | 50.191 | 96.544 | 87.892 | 1.00 | 22.66 | C |

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ATOM 10510 CD  GLN C 396      49.352 97.620 87.265 1.00 22.51        C
ATOM 10511 OE1 GLN C 396      49.496 98.821 87.584 1.00 22.04        O
ATOM 10512 NE2 GLN C 396      48.466 97.212 86.371 1.00 23.29        N
ATOM 10515 C   GLN C 396      52.666 96.407 89.785 1.00 24.63        C
ATOM 10516 O   GLN C 396      53.285 96.084 88.759 1.00 24.94        O
ATOM 10517 N   GLN C 397      53.106 97.279 90.694 1.00 24.56        N
ATOM 10519 CA  GLN C 397      54.235 98.155 90.467 1.00 24.62        C
ATOM 10521 CB  GLN C 397      54.475 99.059 91.687 1.00 25.20        C
ATOM 10524 CG  GLN C 397      55.523 100.154 91.457 1.00 27.11       C
ATOM 10527 CD  GLN C 397      55.510 101.237 92.539 1.00 29.65       C
ATOM 10528 OE1 GLN C 397      56.566 101.650 93.029 1.00 31.23       O
ATOM 10529 NE2 GLN C 397      54.320 101.702 92.902 1.00 31.11       N
ATOM 10532 C   GLN C 397      55.510 97.425 90.056 1.00 23.90        C
ATOM 10533 O   GLN C 397      56.024 97.754 89.006 1.00 24.00        O
ATOM 10534 N   PRO C 398      56.018 96.449 90.834 1.00 23.14        N
ATOM 10535 CA  PRO C 398      57.264 95.743 90.454 1.00 22.24        C
ATOM 10537 CB  PRO C 398      57.496 94.736 91.589 1.00 22.05        C
ATOM 10540 CG  PRO C 398      56.510 95.014 92.630 1.00 22.59        C
ATOM 10543 CD  PRO C 398      55.483 95.960 92.118 1.00 22.92        C
ATOM 10546 C   PRO C 398      57.210 95.022 89.098 1.00 21.53        C
ATOM 10547 O   PRO C 398      58.276 94.799 88.495 1.00 20.78        O
ATOM 10548 N   TYR C 399      56.006 94.678 88.628 1.00 20.65        N
ATOM 10550 CA  TYR C 399      55.868 94.012 87.342 1.00 20.43        C
ATOM 10552 CB  TYR C 399      54.560 93.228 87.297 1.00 20.06        C
ATOM 10555 CG  TYR C 399      54.530 92.131 88.366 1.00 20.44        C
ATOM 10556 CD1 TYR C 399      53.732 92.251 89.492 1.00 21.47        C
ATOM 10558 CE1 TYR C 399      53.706 91.269 90.477 1.00 20.71        C
ATOM 10560 CZ  TYR C 399      54.513 90.151 90.374 1.00 20.44        C
ATOM 10561 OH  TYR C 399      54.516 89.169 91.407 1.00 18.00        O
ATOM 10563 CE2 TYR C 399      55.335 90.035 89.264 1.00 18.95        C
ATOM 10565 CD2 TYR C 399      55.344 91.013 88.281 1.00 18.85        C
ATOM 10567 C   TYR C 399      56.039 95.010 86.195 1.00 20.63        C
ATOM 10568 O   TYR C 399      56.743 94.746 85.211 1.00 20.36        O
ATOM 10569 N   VAL C 400      55.444 96.184 86.349 1.00 20.87        N
ATOM 10571 CA  VAL C 400      55.680 97.285 85.412 1.00 21.27        C
ATOM 10573 CB  VAL C 400      54.905 98.575 85.819 1.00 21.24        C
ATOM 10575 CG1 VAL C 400      55.298 99.756 84.923 1.00 20.25        C
ATOM 10579 CG2 VAL C 400      53.373 98.316 85.790 1.00 21.27        C
ATOM 10583 C   VAL C 400      57.169 97.604 85.364 1.00 21.58        C
ATOM 10584 O   VAL C 400      57.742 97.744 84.283 1.00 21.31        O
ATOM 10585 N   GLU C 401      57.764 97.696 86.558 1.00 22.02        N
ATOM 10587 CA  GLU C 401      59.194 97.969 86.765 1.00 22.50        C
ATOM 10589 CB  GLU C 401      59.504 98.070 88.271 1.00 22.71        C
ATOM 10592 CG  GLU C 401      59.083 99.423 88.854 1.00 24.80        C
ATOM 10595 CD  GLU C 401      59.322 99.617 90.351 1.00 26.00        C
ATOM 10596 OE1 GLU C 401      59.704 100.749 90.728 1.00 27.04       O
ATOM 10597 OE2 GLU C 401      59.095 98.680 91.149 1.00 27.07        O
ATOM 10598 C   GLU C 401      60.099 96.931 86.128 1.00 22.24        C
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ATOM  10599 O   GLU C 401   61.151 97.252 85.569 1.00 22.01      O
ATOM  10600 N   ALA C 402   59.674 95.679 86.225 1.00 22.23      N
ATOM  10602 CA  ALA C 402   60.413 94.587 85.632 1.00 21.76      C
ATOM  10604 CB  ALA C 402   59.864 93.279 86.097 1.00 21.70      C
ATOM  10608 C   ALA C 402   60.314 94.714 84.128 1.00 21.41      C
ATOM  10609 O   ALA C 402   61.321 94.663 83.449 1.00 21.22      O
ATOM  10610 N   LEU C 403   59.102 94.919 83.625 1.00 21.25      N
ATOM  10612 CA  LEU C 403   58.863 94.974 82.192 1.00 21.39      C
ATOM  10614 CB  LEU C 403   57.370 95.078 81.942 1.00 21.10      C
ATOM  10617 CG  LEU C 403   56.973 95.033 80.473 1.00 21.04      C
ATOM  10619 CD1 LEU C 403   57.618 93.868 79.759 1.00 21.23      C
ATOM  10623 CD2 LEU C 403   55.471 94.964 80.370 1.00 21.60      C
ATOM  10627 C   LEU C 403   59.593 96.155 81.508 1.00 21.83      C
ATOM  10628 O   LEU C 403   60.208 96.012 80.451 1.00 21.24      O
ATOM  10629 N   LEU C 404   59.507 97.323 82.118 1.00 22.53      N
ATOM  10631 CA  LEU C 404   60.217 98.482 81.642 1.00 23.54      C
ATOM  10633 CB  LEU C 404   60.033 99.618 82.642 1.00 23.92      C
ATOM  10636 CG  LEU C 404   60.917 100.858 82.554 1.00 25.19     C
ATOM  10638 CD1 LEU C 404   60.904 101.443 81.154 1.00 27.52     C
ATOM  10642 CD2 LEU C 404   60.411 101.860 83.553 1.00 25.81     C
ATOM  10646 C   LEU C 404   61.686 98.129 81.484 1.00 24.32      C
ATOM  10647 O   LEU C 404   62.266 98.304 80.401 1.00 24.50      O
ATOM  10648 N   SER C 405   62.264 97.610 82.573 1.00 25.23      N
ATOM  10650 CA  SER C 405   63.683 97.217 82.647 1.00 25.80      C
ATOM  10652 CB  SER C 405   63.989 96.620 84.037 1.00 26.32      C
ATOM  10655 OG  SER C 405   63.851 97.551 85.112 1.00 27.50      O
ATOM  10657 C   SER C 405   64.093 96.188 81.569 1.00 25.70      C
ATOM  10658 O   SER C 405   65.128 96.317 80.915 1.00 25.38      O
ATOM  10659 N   TYR C 406   63.262 95.170 81.399 1.00 25.90      N
ATOM  10661 CA  TYR C 406   63.587 94.041 80.545 1.00 26.24      C
ATOM  10663 CB  TYR C 406   62.589 92.906 80.769 1.00 25.52      C
ATOM  10666 CG  TYR C 406   62.786 91.683 79.898 1.00 24.35      C
ATOM  10667 CD1 TYR C 406   63.429 90.548 80.382 1.00 24.04      C
ATOM  10669 CE1 TYR C 406   63.586 89.422 79.584 1.00 22.32      C
ATOM  10671 CZ  TYR C 406   63.093 89.428 78.315 1.00 20.54      C
ATOM  10672 OH  TYR C 406   63.237 88.326 77.543 1.00 21.00      O
ATOM  10674 CE2 TYR C 406   62.449 90.516 77.819 1.00 20.39      C
ATOM  10676 CD2 TYR C 406   62.296 91.638 78.605 1.00 21.70      C
ATOM  10678 C   TYR C 406   63.621 94.467 79.082 1.00 27.56      C
ATOM  10679 O   TYR C 406   64.556 94.101 78.365 1.00 27.64      O
ATOM  10680 N   THR C 407   62.614 95.239 78.656 1.00 29.01      N
ATOM  10682 CA  THR C 407   62.495 95.714 77.266 1.00 30.12      C
ATOM  10684 CB  THR C 407   61.170 96.471 77.044 1.00 29.66      C
ATOM  10686 OG1 THR C 407   60.979 97.458 78.066 1.00 27.76      O
ATOM  10688 CG2 THR C 407   59.974 95.548 77.183 1.00 29.40      C
ATOM  10692 C   THR C 407   63.650 96.643 76.900 1.00 32.37      C
ATOM  10693 O   THR C 407   64.193 96.578 75.785 1.00 32.25      O
ATOM  10694 N   ARG C 408   64.029 97.489 77.859 1.00 34.93      N
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 10696 | CA | ARG C 408 | 65.144 | 98.405 | 77.680 | 1.00 | 37.43 | | C |
| ATOM | 10698 | CB | ARG C 408 | 65.228 | 99.405 | 78.845 | 1.00 | 37.99 | | C |
| ATOM | 10701 | CG | ARG C 408 | 64.875 | 100.860 | 78.411 | 1.00 | 40.93 | | C |
| ATOM | 10704 | CD | ARG C 408 | 65.857 | 101.952 | 78.909 | 1.00 | 44.75 | | C |
| ATOM | 10707 | NE | ARG C 408 | 65.166 | 103.150 | 79.413 | 1.00 | 48.25 | | N |
| ATOM | 10709 | CZ | ARG C 408 | 64.328 | 103.186 | 80.468 | 1.00 | 50.24 | | C |
| ATOM | 10710 | NH1 | ARG C 408 | 64.050 | 102.084 | 81.167 | 1.00 | 51.53 | | N |
| ATOM | 10713 | NH2 | ARG C 408 | 63.761 | 104.338 | 80.829 | 1.00 | 50.42 | | N |
| ATOM | 10716 | C | ARG C 408 | 66.472 | 97.656 | 77.487 | 1.00 | 38.95 | | C |
| ATOM | 10717 | O | ARG C 408 | 67.464 | 98.246 | 77.036 | 1.00 | 38.99 | | O |
| ATOM | 10718 | N | ILE C 409 | 66.469 | 96.363 | 77.844 | 1.00 | 40.77 | | N |
| ATOM | 10720 | CA | ILE C 409 | 67.505 | 95.391 | 77.447 | 1.00 | 41.64 | | C |
| ATOM | 10722 | CB | ILE C 409 | 67.941 | 94.592 | 78.681 | 1.00 | 41.57 | | C |
| ATOM | 10724 | CG1 | ILE C 409 | 68.996 | 95.419 | 79.458 | 1.00 | 41.47 | | C |
| ATOM | 10727 | CD1 | ILE C 409 | 68.633 | 95.819 | 80.891 | 1.00 | 40.71 | | C |
| ATOM | 10731 | CG2 | ILE C 409 | 68.462 | 93.204 | 78.282 | 1.00 | 41.94 | | C |
| ATOM | 10735 | C | ILE C 409 | 67.124 | 94.508 | 76.203 | 1.00 | 42.62 | | C |
| ATOM | 10736 | O | ILE C 409 | 67.655 | 94.771 | 75.127 | 1.00 | 42.69 | | O |
| ATOM | 10737 | N | LYS C 410 | 66.235 | 93.507 | 76.304 | 1.00 | 43.56 | | N |
| ATOM | 10739 | CA | LYS C 410 | 65.826 | 92.736 | 75.101 | 1.00 | 44.44 | | C |
| ATOM | 10741 | CB | LYS C 410 | 64.316 | 92.360 | 75.087 | 1.00 | 44.79 | | C |
| ATOM | 10744 | CG | LYS C 410 | 63.734 | 92.042 | 73.657 | 1.00 | 44.91 | | C |
| ATOM | 10747 | CD | LYS C 410 | 62.604 | 91.015 | 73.645 | 1.00 | 44.67 | | C |
| ATOM | 10750 | CE | LYS C 410 | 62.061 | 90.789 | 72.233 | 1.00 | 44.52 | | C |
| ATOM | 10753 | NZ | LYS C 410 | 61.779 | 89.348 | 71.938 | 1.00 | 44.64 | | N |
| ATOM | 10757 | C | LYS C 410 | 66.179 | 93.500 | 73.814 | 1.00 | 44.90 | | C |
| ATOM | 10758 | O | LYS C 410 | 67.136 | 93.128 | 73.119 | 1.00 | 45.15 | | O |
| ATOM | 10759 | N | ARG C 411 | 65.407 | 94.547 | 73.494 | 1.00 | 45.25 | | N |
| ATOM | 10761 | CA | ARG C 411 | 65.760 | 95.467 | 72.394 | 1.00 | 45.54 | | C |
| ATOM | 10763 | CB | ARG C 411 | 64.745 | 95.430 | 71.223 | 1.00 | 45.91 | | C |
| ATOM | 10766 | CG | ARG C 411 | 64.244 | 94.020 | 70.836 | 1.00 | 47.88 | | C |
| ATOM | 10769 | CD | ARG C 411 | 63.762 | 93.849 | 69.363 | 1.00 | 50.08 | | C |
| ATOM | 10772 | NE | ARG C 411 | 62.572 | 92.977 | 69.270 | 1.00 | 51.85 | | N |
| ATOM | 10774 | CZ | ARG C 411 | 61.801 | 92.834 | 68.182 | 1.00 | 52.30 | | C |
| ATOM | 10775 | NH1 | ARG C 411 | 62.081 | 93.503 | 67.058 | 1.00 | 51.46 | | N |
| ATOM | 10778 | NH2 | ARG C 411 | 60.740 | 92.014 | 68.221 | 1.00 | 51.88 | | N |
| ATOM | 10781 | C | ARG C 411 | 65.895 | 96.879 | 72.989 | 1.00 | 44.58 | | C |
| ATOM | 10782 | O | ARG C 411 | 64.907 | 97.516 | 73.337 | 1.00 | 44.52 | | O |
| ATOM | 10783 | N | PRO C 412 | 67.118 | 97.353 | 73.146 | 1.00 | 43.52 | | N |
| ATOM | 10784 | CA | PRO C 412 | 67.335 | 98.711 | 73.656 | 1.00 | 42.85 | | C |
| ATOM | 10786 | CB | PRO C 412 | 68.805 | 98.683 | 74.111 | 1.00 | 43.05 | | C |
| ATOM | 10789 | CG | PRO C 412 | 69.259 | 97.234 | 73.954 | 1.00 | 43.40 | | C |
| ATOM | 10792 | CD | PRO C 412 | 68.390 | 96.661 | 72.874 | 1.00 | 43.60 | | C |
| ATOM | 10795 | C | PRO C 412 | 67.115 | 99.809 | 72.599 | 1.00 | 41.83 | | C |
| ATOM | 10796 | O | PRO C 412 | 66.999 | 100.982 | 72.974 | 1.00 | 41.57 | | O |
| ATOM | 10797 | N | GLN C 413 | 67.063 | 99.434 | 71.317 | 1.00 | 40.57 | | N |
| ATOM | 10799 | CA | GLN C 413 | 66.860 | 100.396 | 70.224 | 1.00 | 39.64 | | C |
| ATOM | 10801 | CB | GLN C 413 | 67.788 | 100.061 | 69.050 | 1.00 | 39.85 | | C |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 10804 | CG | GLN | C 413 | 69.160 | 100.752 | 69.130 | 1.00 | 40.39 | C |
| ATOM | 10807 | CD | GLN | C 413 | 70.065 | 100.359 | 67.981 | 1.00 | 41.42 | C |
| ATOM | 10808 | OE1 | GLN | C 413 | 70.388 | 101.181 | 67.112 | 1.00 | 41.02 | O |
| ATOM | 10809 | NE2 | GLN | C 413 | 70.463 | 99.089 | 67.961 | 1.00 | 42.51 | N |
| ATOM | 10812 | C | GLN | C 413 | 65.394 | 100.517 | 69.745 | 1.00 | 38.41 | C |
| ATOM | 10813 | O | GLN | C 413 | 65.066 | 101.360 | 68.918 | 1.00 | 38.15 | O |
| ATOM | 10814 | N | ASP | C 414 | 64.517 | 99.678 | 70.269 | 1.00 | 37.13 | N |
| ATOM | 10816 | CA | ASP | C 414 | 63.091 | 99.851 | 70.068 | 1.00 | 36.31 | C |
| ATOM | 10818 | CB | ASP | C 414 | 62.430 | 98.498 | 69.769 | 1.00 | 36.47 | C |
| ATOM | 10821 | CG | ASP | C 414 | 60.990 | 98.624 | 69.258 | 1.00 | 36.99 | C |
| ATOM | 10822 | OD1 | ASP | C 414 | 60.686 | 99.568 | 68.493 | 1.00 | 36.52 | O |
| ATOM | 10823 | OD2 | ASP | C 414 | 60.094 | 97.791 | 69.556 | 1.00 | 39.00 | O |
| ATOM | 10824 | C | ASP | C 414 | 62.533 | 100.505 | 71.335 | 1.00 | 35.41 | C |
| ATOM | 10825 | O | ASP | C 414 | 61.839 | 99.879 | 72.131 | 1.00 | 35.23 | O |
| ATOM | 10826 | N | GLN | C 415 | 62.872 | 101.776 | 71.522 | 1.00 | 34.39 | N |
| ATOM | 10828 | CA | GLN | C 415 | 62.339 | 102.570 | 72.629 | 1.00 | 33.63 | C |
| ATOM | 10830 | CB | GLN | C 415 | 62.682 | 104.044 | 72.436 | 1.00 | 33.86 | C |
| ATOM | 10833 | CG | GLN | C 415 | 62.339 | 104.583 | 71.048 | 1.00 | 35.40 | C |
| ATOM | 10836 | CD | GLN | C 415 | 62.266 | 106.094 | 71.022 | 1.00 | 38.18 | C |
| ATOM | 10837 | OE1 | GLN | C 415 | 62.561 | 106.742 | 72.048 | 1.00 | 39.96 | O |
| ATOM | 10838 | NE2 | GLN | C 415 | 61.875 | 106.672 | 69.860 | 1.00 | 36.76 | N |
| ATOM | 10841 | C | GLN | C 415 | 60.832 | 102.451 | 72.799 | 1.00 | 32.52 | C |
| ATOM | 10842 | O | GLN | C 415 | 60.351 | 102.422 | 73.927 | 1.00 | 32.48 | O |
| ATOM | 10843 | N | LEU | C 416 | 60.100 | 102.362 | 71.683 | 1.00 | 31.46 | N |
| ATOM | 10845 | CA | LEU | C 416 | 58.622 | 102.381 | 71.682 | 1.00 | 30.61 | C |
| ATOM | 10847 | CB | LEU | C 416 | 58.084 | 102.868 | 70.329 | 1.00 | 30.36 | C |
| ATOM | 10850 | CG | LEU | C 416 | 58.189 | 104.381 | 70.082 | 1.00 | 30.01 | C |
| ATOM | 10852 | CD1 | LEU | C 416 | 57.722 | 104.728 | 68.657 | 1.00 | 29.67 | C |
| ATOM | 10856 | CD2 | LEU | C 416 | 57.417 | 105.197 | 71.141 | 1.00 | 28.54 | C |
| ATOM | 10860 | C | LEU | C 416 | 57.962 | 101.053 | 72.001 | 1.00 | 30.03 | C |
| ATOM | 10861 | O | LEU | C 416 | 56.763 | 100.887 | 71.787 | 1.00 | 29.86 | O |
| ATOM | 10862 | N | ARG | C 417 | 58.745 | 100.120 | 72.530 | 1.00 | 29.46 | N |
| ATOM | 10864 | CA | ARG | C 417 | 58.312 | 98.747 | 72.691 | 1.00 | 28.84 | C |
| ATOM | 10866 | CB | ARG | C 417 | 59.532 | 97.849 | 72.832 | 1.00 | 29.00 | C |
| ATOM | 10869 | CG | ARG | C 417 | 59.152 | 96.410 | 72.839 | 1.00 | 30.27 | C |
| ATOM | 10872 | CD | ARG | C 417 | 60.296 | 95.455 | 72.695 | 1.00 | 30.86 | C |
| ATOM | 10875 | NE | ARG | C 417 | 59.780 | 94.091 | 72.736 | 1.00 | 30.70 | N |
| ATOM | 10877 | CZ | ARG | C 417 | 59.188 | 93.482 | 71.728 | 1.00 | 29.97 | C |
| ATOM | 10878 | NH1 | ARG | C 417 | 59.039 | 94.098 | 70.562 | 1.00 | 30.02 | N |
| ATOM | 10881 | NH2 | ARG | C 417 | 58.759 | 92.243 | 71.884 | 1.00 | 29.81 | N |
| ATOM | 10884 | C | ARG | C 417 | 57.446 | 98.640 | 73.935 | 1.00 | 27.85 | C |
| ATOM | 10885 | O | ARG | C 417 | 56.313 | 98.169 | 73.891 | 1.00 | 27.41 | O |
| ATOM | 10886 | N | PHE | C 418 | 58.001 | 99.090 | 75.050 | 1.00 | 26.77 | N |
| ATOM | 10888 | CA | PHE | C 418 | 57.244 | 99.151 | 76.292 | 1.00 | 26.02 | C |
| ATOM | 10890 | CB | PHE | C 418 | 58.124 | 99.790 | 77.366 | 1.00 | 26.07 | C |
| ATOM | 10893 | CG | PHE | C 418 | 57.465 | 99.951 | 78.695 | 1.00 | 26.71 | C |
| ATOM | 10894 | CD1 | PHE | C 418 | 56.972 | 98.859 | 79.379 | 1.00 | 28.37 | C |
| ATOM | 10896 | CE1 | PHE | C 418 | 56.381 | 99.019 | 80.637 | 1.00 | 28.78 | C |

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ATOM 10898 CZ  PHE C 418    56.311 100.272 81.214 1.00 28.66    C
ATOM 10900 CE2 PHE C 418    56.797 101.363 80.532 1.00 28.52    C
ATOM 10902 CD2 PHE C 418    57.376 101.200 79.288 1.00 28.05    C
ATOM 10904 C   PHE C 418    55.865 99.856 76.101 1.00 24.94     C
ATOM 10905 O   PHE C 418    54.833 99.207 76.253 1.00 24.89     O
ATOM 10906 N   PRO C 419    55.829 101.136 75.726 1.00 23.51    N
ATOM 10907 CA  PRO C 419    54.547 101.788 75.485 1.00 22.93    C
ATOM 10909 CB  PRO C 419    54.936 103.158 74.911 1.00 22.79    C
ATOM 10912 CG  PRO C 419    56.367 103.140 74.728 1.00 22.59    C
ATOM 10915 CD  PRO C 419    56.955 102.053 75.499 1.00 23.02    C
ATOM 10918 C   PRO C 419    53.657 101.003 74.512 1.00 22.59    C
ATOM 10919 O   PRO C 419    52.470 100.964 74.739 1.00 21.78    O
ATOM 10920 N   ARG C 420    54.204 100.364 73.489 1.00 22.69    N
ATOM 10922 CA  ARG C 420    53.374 99.531 72.612 1.00 23.38     C
ATOM 10924 CB  ARG C 420    54.168 98.976 71.439 1.00 23.63     C
ATOM 10927 CG  ARG C 420    54.203 99.911 70.269 1.00 26.56     C
ATOM 10930 CD  ARG C 420    55.015 99.395 69.093 1.00 30.48     C
ATOM 10933 NE  ARG C 420    55.047 100.353 67.994 1.00 31.76    N
ATOM 10935 CZ  ARG C 420    56.150 100.877 67.508 1.00 35.20    C
ATOM 10936 NH1 ARG C 420    57.327 100.526 68.022 1.00 37.26    N
ATOM 10939 NH2 ARG C 420    56.089 101.755 66.508 1.00 35.48    N
ATOM 10942 C   ARG C 420    52.690 98.382 73.340 1.00 23.13     C
ATOM 10943 O   ARG C 420    51.501 98.192 73.181 1.00 23.66     O
ATOM 10944 N   MET C 421    53.427 97.613 74.123 1.00 22.82     N
ATOM 10946 CA  MET C 421    52.833 96.546 74.923 1.00 23.10     C
ATOM 10948 CB  MET C 421    53.911 95.828 75.737 1.00 23.53     C
ATOM 10951 CG  MET C 421    54.814 94.952 74.908 1.00 24.77     C
ATOM 10954 SD  MET C 421    56.279 94.651 75.816 1.00 25.81     S
ATOM 10955 CE  MET C 421    55.712 93.498 76.830 1.00 30.07     C
ATOM 10959 C   MET C 421    51.756 97.005 75.914 1.00 22.88     C
ATOM 10960 O   MET C 421    50.753 96.313 76.104 1.00 22.80     O
ATOM 10961 N   LEU C 422    51.977 98.132 76.583 1.00 22.36     N
ATOM 10963 CA  LEU C 422    51.009 98.616 77.541 1.00 22.39     C
ATOM 10965 CB  LEU C 422    51.574 99.783 78.335 1.00 23.02     C
ATOM 10968 CG  LEU C 422    52.762 99.540 79.273 1.00 23.86     C
ATOM 10970 CD1 LEU C 422    53.371 100.881 79.647 1.00 24.96    C
ATOM 10974 CD2 LEU C 422    52.356 98.814 80.491 1.00 23.97     C
ATOM 10978 C   LEU C 422    49.721 99.053 76.849 1.00 22.31     C
ATOM 10979 O   LEU C 422    48.625 98.900 77.408 1.00 22.34     O
ATOM 10980 N   MET C 423    49.850 99.605 75.641 1.00 21.88     N
ATOM 10982 CA  MET C 423    48.697 100.067 74.869 1.00 21.52    C
ATOM 10984 CB  MET C 423    49.110 100.766 73.558 1.00 22.01    C
ATOM 10987 CG  MET C 423    49.774 102.117 73.701 1.00 24.76    C
ATOM 10990 SD  MET C 423    48.657 103.496 74.017 1.00 31.13    S
ATOM 10991 CE  MET C 423    48.560 103.343 75.702 1.00 33.55    C
ATOM 10995 C   MET C 423    47.827 98.884 74.539 1.00 20.24     C
ATOM 10996 O   MET C 423    46.648 99.035 74.349 1.00 19.37     O
ATOM 10997 N   LYS C 424    48.413 97.705 74.440 1.00 19.65     N
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 10999 | CA | LYS C 424 | 47.597 | 96.507 | 74.262 | 1.00 | 20.04 | | C |
| ATOM | 11001 | CB | LYS C 424 | 48.463 | 95.272 | 73.967 | 1.00 | 20.40 | | C |
| ATOM | 11004 | CG | LYS C 424 | 49.280 | 95.397 | 72.697 | 1.00 | 20.67 | | C |
| ATOM | 11007 | CD | LYS C 424 | 48.381 | 95.612 | 71.561 | 1.00 | 23.11 | | C |
| ATOM | 11010 | CE | LYS C 424 | 49.066 | 95.450 | 70.262 | 1.00 | 25.92 | | C |
| ATOM | 11013 | NZ | LYS C 424 | 48.621 | 96.506 | 69.295 | 1.00 | 27.86 | | N |
| ATOM | 11017 | C | LYS C 424 | 46.643 | 96.245 | 75.439 | 1.00 | 19.40 | | C |
| ATOM | 11018 | O | LYS C 424 | 45.559 | 95.758 | 75.216 | 1.00 | 19.42 | | O |
| ATOM | 11019 | N | LEU C 425 | 47.035 | 96.569 | 76.664 | 1.00 | 18.89 | | N |
| ATOM | 11021 | CA | LEU C 425 | 46.104 | 96.544 | 77.786 | 1.00 | 19.22 | | C |
| ATOM | 11023 | CB | LEU C 425 | 46.748 | 97.006 | 79.113 | 1.00 | 19.39 | | C |
| ATOM | 11026 | CG | LEU C 425 | 48.042 | 96.310 | 79.577 | 1.00 | 20.01 | | C |
| ATOM | 11028 | CD1 | LEU C 425 | 48.628 | 96.958 | 80.790 | 1.00 | 20.39 | | C |
| ATOM | 11032 | CD2 | LEU C 425 | 47.800 | 94.848 | 79.833 | 1.00 | 20.80 | | C |
| ATOM | 11036 | C | LEU C 425 | 44.901 | 97.422 | 77.495 | 1.00 | 19.35 | | C |
| ATOM | 11037 | O | LEU C 425 | 43.777 | 97.057 | 77.841 | 1.00 | 20.43 | | O |
| ATOM | 11038 | N | VAL C 426 | 45.114 | 98.581 | 76.877 | 1.00 | 18.93 | | N |
| ATOM | 11040 | CA | VAL C 426 | 43.998 | 99.449 | 76.508 | 1.00 | 18.25 | | C |
| ATOM | 11042 | CB | VAL C 426 | 44.463 | 100.753 | 75.869 | 1.00 | 17.72 | | C |
| ATOM | 11044 | CG1 | VAL C 426 | 43.305 | 101.664 | 75.634 | 1.00 | 17.87 | | C |
| ATOM | 11048 | CG2 | VAL C 426 | 45.431 | 101.441 | 76.728 | 1.00 | 17.62 | | C |
| ATOM | 11052 | C | VAL C 426 | 43.060 | 98.702 | 75.544 | 1.00 | 18.59 | | C |
| ATOM | 11053 | O | VAL C 426 | 41.866 | 98.691 | 75.740 | 1.00 | 18.88 | | O |
| ATOM | 11054 | N | SER C 427 | 43.589 | 98.055 | 74.522 | 1.00 | 18.98 | | N |
| ATOM | 11056 | CA | SER C 427 | 42.762 | 97.244 | 73.626 | 1.00 | 19.96 | | C |
| ATOM | 11058 | CB | SER C 427 | 43.615 | 96.702 | 72.494 | 1.00 | 20.17 | | C |
| ATOM | 11061 | OG | SER C 427 | 44.168 | 97.785 | 71.753 | 1.00 | 23.61 | | O |
| ATOM | 11063 | C | SER C 427 | 42.054 | 96.068 | 74.305 | 1.00 | 20.13 | | C |
| ATOM | 11064 | O | SER C 427 | 40.925 | 95.759 | 73.969 | 1.00 | 20.62 | | O |
| ATOM | 11065 | N | LEU C 428 | 42.718 | 95.405 | 75.249 | 1.00 | 20.31 | | N |
| ATOM | 11067 | CA | LEU C 428 | 42.133 | 94.265 | 75.939 | 1.00 | 20.50 | | C |
| ATOM | 11069 | CB | LEU C 428 | 43.143 | 93.575 | 76.818 | 1.00 | 20.04 | | C |
| ATOM | 11072 | CG | LEU C 428 | 44.127 | 92.748 | 75.990 | 1.00 | 20.36 | | C |
| ATOM | 11074 | CD1 | LEU C 428 | 45.361 | 92.391 | 76.836 | 1.00 | 20.66 | | C |
| ATOM | 11078 | CD2 | LEU C 428 | 43.481 | 91.488 | 75.392 | 1.00 | 19.60 | | C |
| ATOM | 11082 | C | LEU C 428 | 40.932 | 94.658 | 76.778 | 1.00 | 21.54 | | C |
| ATOM | 11083 | O | LEU C 428 | 40.072 | 93.821 | 77.048 | 1.00 | 22.14 | | O |
| ATOM | 11084 | N | ARG C 429 | 40.836 | 95.929 | 77.155 | 1.00 | 22.26 | | N |
| ATOM | 11086 | CA | ARG C 429 | 39.649 | 96.408 | 77.855 | 1.00 | 22.80 | | C |
| ATOM | 11088 | CB | ARG C 429 | 39.888 | 97.775 | 78.466 | 1.00 | 22.76 | | C |
| ATOM | 11091 | CG | ARG C 429 | 40.774 | 97.734 | 79.595 | 1.00 | 22.71 | | C |
| ATOM | 11094 | CD | ARG C 429 | 40.192 | 97.040 | 80.807 | 1.00 | 22.42 | | C |
| ATOM | 11097 | NE | ARG C 429 | 41.209 | 97.025 | 81.856 | 1.00 | 21.48 | | N |
| ATOM | 11099 | CZ | ARG C 429 | 41.181 | 97.742 | 82.964 | 1.00 | 18.67 | | C |
| ATOM | 11100 | NH1 | ARG C 429 | 40.154 | 98.517 | 83.256 | 1.00 | 18.19 | | N |
| ATOM | 11103 | NH2 | ARG C 429 | 42.184 | 97.631 | 83.811 | 1.00 | 19.10 | | N |
| ATOM | 11106 | C | ARG C 429 | 38.472 | 96.516 | 76.929 | 1.00 | 23.20 | | C |
| ATOM | 11107 | O | ARG C 429 | 37.347 | 96.174 | 77.309 | 1.00 | 24.13 | | O |

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ATOM 11108 N   THR C 430    38.708 97.050 75.741 1.00 23.13        N
ATOM 11110 CA  THR C 430    37.625 97.177 74.792 1.00 23.58        C
ATOM 11112 CB  THR C 430    38.035 98.089 73.602 1.00 24.17        C
ATOM 11114 OG1 THR C 430    38.077 99.451 74.041 1.00 24.20        O
ATOM 11116 CG2 THR C 430    36.957 98.078 72.485 1.00 24.77        C
ATOM 11120 C   THR C 430    37.213 95.773 74.332 1.00 23.10        C
ATOM 11121 O   THR C 430    36.038 95.475 74.228 1.00 22.85        O
ATOM 11122 N   LEU C 431    38.178 94.896 74.095 1.00 22.68        N
ATOM 11124 CA  LEU C 431    37.847 93.547 73.642 1.00 22.67        C
ATOM 11126 CB  LEU C 431    39.108 92.776 73.221 1.00 22.51        C
ATOM 11129 CG  LEU C 431    39.777 93.235 71.926 1.00 21.41        C
ATOM 11131 CD1 LEU C 431    41.229 92.866 71.902 1.00 20.87        C
ATOM 11135 CD2 LEU C 431    39.119 92.608 70.753 1.00 22.33        C
ATOM 11139 C   LEU C 431    37.040 92.784 74.710 1.00 22.32        C
ATOM 11140 O   LEU C 431    36.163 92.006 74.381 1.00 21.48        O
ATOM 11141 N   SER C 432    37.320 93.048 75.977 1.00 22.37        N
ATOM 11143 CA  SER C 432    36.553 92.468 77.084 1.00 22.86        C
ATOM 11145 CB  SER C 432    37.152 92.941 78.409 1.00 22.68        C
ATOM 11148 OG  SER C 432    36.399 92.501 79.500 1.00 24.39        O
ATOM 11150 C   SER C 432    35.060 92.824 76.994 1.00 22.96        C
ATOM 11151 O   SER C 432    34.193 91.959 77.149 1.00 22.80        O
ATOM 11152 N   SER C 433    34.775 94.095 76.727 1.00 23.08        N
ATOM 11154 CA  SER C 433    33.417 94.548 76.439 1.00 23.57        C
ATOM 11156 CB  SER C 433    33.391 96.032 76.104 1.00 23.61        C
ATOM 11159 OG  SER C 433    33.570 96.801 77.267 1.00 27.21        O
ATOM 11161 C   SER C 433    32.809 93.845 75.263 1.00 23.69        C
ATOM 11162 O   SER C 433    31.679 93.410 75.333 1.00 24.17        O
ATOM 11163 N   VAL C 434    33.543 93.770 74.158 1.00 23.72        N
ATOM 11165 CA  VAL C 434    33.012 93.189 72.947 1.00 23.55        C
ATOM 11167 CB  VAL C 434    34.014 93.293 71.790 1.00 23.82        C
ATOM 11169 CG1 VAL C 434    33.522 92.577 70.549 1.00 24.73        C
ATOM 11173 CG2 VAL C 434    34.210 94.724 71.434 1.00 23.97        C
ATOM 11177 C   VAL C 434    32.630 91.752 73.247 1.00 23.22        C
ATOM 11178 O   VAL C 434    31.640 91.258 72.725 1.00 23.33        O
ATOM 11179 N   HIS C 435    33.381 91.105 74.134 1.00 23.17        N
ATOM 11181 CA  HIS C 435    33.095 89.722 74.541 1.00 23.00        C
ATOM 11183 CB  HIS C 435    34.271 89.100 75.309 1.00 22.54        C
ATOM 11186 CG  HIS C 435    33.997 87.712 75.770 1.00 21.09        C
ATOM 11187 ND1 HIS C 435    33.873 87.382 77.097 1.00 20.17        N
ATOM 11189 CE1 HIS C 435    33.587 86.100 77.207 1.00 20.60        C
ATOM 11191 NE2 HIS C 435    33.481 85.596 75.995 1.00 21.20        N
ATOM 11193 CD2 HIS C 435    33.732 86.585 75.078 1.00 21.14        C
ATOM 11195 C   HIS C 435    31.795 89.622 75.358 1.00 23.30        C
ATOM 11196 O   HIS C 435    30.950 88.751 75.106 1.00 23.08        O
ATOM 11197 N   SER C 436    31.624 90.523 76.313 1.00 23.61        N
ATOM 11199 CA  SER C 436    30.348 90.644 77.026 1.00 24.19        C
ATOM 11201 CB  SER C 436    30.412 91.801 78.033 1.00 23.96        C
ATOM 11204 OG  SER C 436    31.376 91.512 79.061 1.00 25.95        O
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| ATOM | 11206 | C | SER C 436 | 29.137 | 90.794 | 76.086 | 1.00 | 24.55 | C |
|------|-------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 11207 | O | SER C 436 | 28.107 | 90.189 | 76.304 | 1.00 | 24.85 | O |
| ATOM | 11208 | N | GLU C 437 | 29.270 | 91.566 | 75.018 | 1.00 | 25.17 | N |
| ATOM | 11210 | CA | GLU C 437 | 28.182 | 91.721 | 74.060 | 1.00 | 25.38 | C |
| ATOM | 11212 | CB | GLU C 437 | 28.445 | 92.896 | 73.113 | 1.00 | 26.09 | C |
| ATOM | 11215 | CG | GLU C 437 | 28.585 | 94.242 | 73.846 | 1.00 | 29.84 | C |
| ATOM | 11218 | CD | GLU C 437 | 29.059 | 95.406 | 72.951 | 1.00 | 35.02 | C |
| ATOM | 11219 | OE1 | GLU C 437 | 28.537 | 96.536 | 73.136 | 1.00 | 38.26 | O |
| ATOM | 11220 | OE2 | GLU C 437 | 29.945 | 95.214 | 72.065 | 1.00 | 37.73 | O |
| ATOM | 11221 | C | GLU C 437 | 27.946 | 90.439 | 73.280 | 1.00 | 24.04 | C |
| ATOM | 11222 | O | GLU C 437 | 26.836 | 90.146 | 72.933 | 1.00 | 24.34 | O |
| ATOM | 11223 | N | GLN C 438 | 28.991 | 89.682 | 73.011 | 1.00 | 23.03 | N |
| ATOM | 11225 | CA | GLN C 438 | 28.870 | 88.392 | 72.345 | 1.00 | 22.31 | C |
| ATOM | 11227 | CB | GLN C 438 | 30.260 | 87.855 | 72.023 | 1.00 | 22.24 | C |
| ATOM | 11230 | CG | GLN C 438 | 30.306 | 86.428 | 71.474 | 1.00 | 21.39 | C |
| ATOM | 11233 | CD | GLN C 438 | 29.680 | 86.321 | 70.112 | 1.00 | 21.22 | C |
| ATOM | 11234 | OE1 | GLN C 438 | 30.380 | 86.346 | 69.096 | 1.00 | 21.68 | O |
| ATOM | 11235 | NE2 | GLN C 438 | 28.363 | 86.200 | 70.077 | 1.00 | 20.20 | N |
| ATOM | 11238 | C | GLN C 438 | 28.170 | 87.374 | 73.209 | 1.00 | 22.57 | C |
| ATOM | 11239 | O | GLN C 438 | 27.448 | 86.542 | 72.707 | 1.00 | 22.01 | O |
| ATOM | 11240 | N | VAL C 439 | 28.427 | 87.425 | 74.514 | 1.00 | 23.28 | N |
| ATOM | 11242 | CA | VAL C 439 | 27.872 | 86.477 | 75.476 | 1.00 | 23.42 | C |
| ATOM | 11244 | CB | VAL C 439 | 28.555 | 86.642 | 76.880 | 1.00 | 23.00 | C |
| ATOM | 11246 | CG1 | VAL C 439 | 27.799 | 85.909 | 77.962 | 1.00 | 22.05 | C |
| ATOM | 11250 | CG2 | VAL C 439 | 29.994 | 86.150 | 76.831 | 1.00 | 22.25 | C |
| ATOM | 11254 | C | VAL C 439 | 26.369 | 86.703 | 75.560 | 1.00 | 24.45 | C |
| ATOM | 11255 | O | VAL C 439 | 25.580 | 85.759 | 75.508 | 1.00 | 24.80 | O |
| ATOM | 11256 | N | PHE C 440 | 25.996 | 87.972 | 75.683 | 1.00 | 25.55 | N |
| ATOM | 11258 | CA | PHE C 440 | 24.601 | 88.411 | 75.700 | 1.00 | 26.37 | C |
| ATOM | 11260 | CB | PHE C 440 | 24.529 | 89.929 | 75.994 | 1.00 | 26.69 | C |
| ATOM | 11263 | CG | PHE C 440 | 23.247 | 90.599 | 75.550 | 1.00 | 29.64 | C |
| ATOM | 11264 | CD1 | PHE C 440 | 22.212 | 90.846 | 76.475 | 1.00 | 31.80 | C |
| ATOM | 11266 | CE1 | PHE C 440 | 21.032 | 91.452 | 76.082 | 1.00 | 31.89 | C |
| ATOM | 11268 | CZ | PHE C 440 | 20.858 | 91.834 | 74.742 | 1.00 | 33.13 | C |
| ATOM | 11270 | CE2 | PHE C 440 | 21.869 | 91.605 | 73.808 | 1.00 | 32.53 | C |
| ATOM | 11272 | CD2 | PHE C 440 | 23.072 | 91.000 | 74.217 | 1.00 | 31.85 | C |
| ATOM | 11274 | C | PHE C 440 | 23.925 | 88.041 | 74.378 | 1.00 | 26.30 | C |
| ATOM | 11275 | O | PHE C 440 | 22.802 | 87.550 | 74.383 | 1.00 | 26.75 | O |
| ATOM | 11276 | N | ALA C 441 | 24.602 | 88.260 | 73.256 | 1.00 | 26.40 | N |
| ATOM | 11278 | CA | ALA C 441 | 24.084 | 87.849 | 71.937 | 1.00 | 26.57 | C |
| ATOM | 11280 | CB | ALA C 441 | 25.089 | 88.169 | 70.814 | 1.00 | 26.19 | C |
| ATOM | 11284 | C | ALA C 441 | 23.737 | 86.366 | 71.910 | 1.00 | 26.95 | C |
| ATOM | 11285 | O | ALA C 441 | 22.739 | 85.974 | 71.341 | 1.00 | 27.04 | O |
| ATOM | 11286 | N | LEU C 442 | 24.563 | 85.553 | 72.548 | 1.00 | 27.68 | N |
| ATOM | 11288 | CA | LEU C 442 | 24.405 | 84.115 | 72.513 | 1.00 | 28.09 | C |
| ATOM | 11290 | CB | LEU C 442 | 25.705 | 83.446 | 72.953 | 1.00 | 28.18 | C |
| ATOM | 11293 | CG | LEU C 442 | 26.805 | 83.488 | 71.897 | 1.00 | 27.85 | C |
| ATOM | 11295 | CD1 | LEU C 442 | 28.176 | 83.211 | 72.498 | 1.00 | 26.93 | C |

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ATOM 11299 CD2 LEU C 442    26.486 82.474 70.801 1.00 29.66        C
ATOM 11303 C   LEU C 442    23.246 83.654 73.383 1.00 28.80        C
ATOM 11304 O   LEU C 442    22.641 82.644 73.101 1.00 28.43        O
ATOM 11305 N   ARG C 443    22.943 84.404 74.436 1.00 30.18        N
ATOM 11307 CA  ARG C 443    21.785 84.137 75.303 1.00 31.15        C
ATOM 11309 CB  ARG C 443    21.807 85.082 76.515 1.00 31.37        C
ATOM 11312 CG  ARG C 443    23.031 84.919 77.410 1.00 33.62        C
ATOM 11315 CD  ARG C 443    22.787 85.087 78.902 1.00 36.68        C
ATOM 11318 NE  ARG C 443    21.711 84.218 79.389 1.00 38.98        N
ATOM 11320 CZ  ARG C 443    21.560 83.799 80.649 1.00 40.80        C
ATOM 11321 NH1 ARG C 443    22.414 84.141 81.614 1.00 41.65        N
ATOM 11324 NH2 ARG C 443    20.527 83.023 80.944 1.00 41.03        N
ATOM 11327 C   ARG C 443    20.461 84.303 74.550 1.00 31.48        C
ATOM 11328 O   ARG C 443    19.476 83.632 74.832 1.00 31.71        O
ATOM 11329 N   LEU C 444    20.440 85.216 73.593 1.00 32.22        N
ATOM 11331 CA  LEU C 444    19.275 85.391 72.735 1.00 32.49        C
ATOM 11333 CB  LEU C 444    19.263 86.791 72.088 1.00 32.71        C
ATOM 11336 CG  LEU C 444    19.608 88.050 72.915 1.00 33.52        C
ATOM 11338 CD1 LEU C 444    19.703 89.258 71.979 1.00 33.88        C
ATOM 11342 CD2 LEU C 444    18.645 88.336 74.081 1.00 33.13        C
ATOM 11346 C   LEU C 444    19.174 84.304 71.650 1.00 32.21        C
ATOM 11347 O   LEU C 444    18.157 84.220 71.011 1.00 32.73        O
ATOM 11348 N   GLN C 445    20.207 83.495 71.422 1.00 32.00        N
ATOM 11350 CA  GLN C 445    20.088 82.295 70.574 1.00 32.03        C
ATOM 11352 CB  GLN C 445    21.333 82.109 69.714 1.00 32.11        C
ATOM 11355 CG  GLN C 445    21.583 83.152 68.654 1.00 32.95        C
ATOM 11358 CD  GLN C 445    23.080 83.312 68.378 1.00 35.56        C
ATOM 11359 OE1 GLN C 445    23.633 84.409 68.550 1.00 37.57        O
ATOM 11360 NE2 GLN C 445    23.747 82.212 67.993 1.00 35.16        N
ATOM 11363 C   GLN C 445    19.881 81.006 71.400 1.00 32.02        C
ATOM 11364 O   GLN C 445    20.138 79.892 70.920 1.00 31.71        O
ATOM 11365 N   ASP C 446    19.411 81.174 72.637 1.00 32.13        N
ATOM 11367 CA  ASP C 446    19.342 80.111 73.653 1.00 32.17        C
ATOM 11369 CB  ASP C 446    18.143 79.189 73.380 1.00 32.55        C
ATOM 11372 CG  ASP C 446    16.862 79.694 74.031 1.00 34.14        C
ATOM 11373 OD1 ASP C 446    16.670 80.933 74.083 1.00 35.83        O
ATOM 11374 OD2 ASP C 446    15.992 78.929 74.510 1.00 35.63        O
ATOM 11375 C   ASP C 446    20.627 79.286 73.866 1.00 31.43        C
ATOM 11376 O   ASP C 446    20.552 78.140 74.286 1.00 32.15        O
ATOM 11377 N   LYS C 447    21.793 79.869 73.592 1.00 30.34        N
ATOM 11379 CA  LYS C 447    23.091 79.250 73.891 1.00 29.31        C
ATOM 11381 CB  LYS C 447    24.023 79.305 72.675 1.00 29.61        C
ATOM 11384 CG  LYS C 447    23.320 78.828 71.384 1.00 32.16        C
ATOM 11387 CD  LYS C 447    24.207 77.982 70.451 1.00 34.89        C
ATOM 11390 CE  LYS C 447    24.630 78.733 69.176 1.00 35.99        C
ATOM 11393 NZ  LYS C 447    26.113 78.642 68.909 1.00 36.81        N
ATOM 11397 C   LYS C 447    23.687 79.970 75.089 1.00 27.49        C
ATOM 11398 O   LYS C 447    24.207 81.067 74.960 1.00 26.86        O
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ATOM  11399 N   LYS C 448    23.566 79.337 76.260 1.00 25.77      N
ATOM  11401 CA  LYS C 448    23.990 79.901 77.547 1.00 24.04      C
ATOM  11403 CB  LYS C 448    22.863 79.739 78.584 1.00 24.27      C
ATOM  11406 CG  LYS C 448    21.498 80.363 78.155 1.00 25.53      C
ATOM  11409 CD  LYS C 448    20.343 80.087 79.162 1.00 26.43      C
ATOM  11412 CE  LYS C 448    18.949 79.916 78.473 1.00 26.81      C
ATOM  11415 NZ  LYS C 448    17.814 79.670 79.440 1.00 25.41      N
ATOM  11419 C   LYS C 448    25.278 79.239 78.044 1.00 21.92      C
ATOM  11420 O   LYS C 448    25.595 78.115 77.704 1.00 21.75      O
ATOM  11421 N   LEU C 449    26.031 79.947 78.857 1.00 19.78      N
ATOM  11423 CA  LEU C 449    27.305 79.422 79.319 1.00 18.23      C
ATOM  11425 CB  LEU C 449    28.199 80.556 79.849 1.00 18.32      C
ATOM  11428 CG  LEU C 449    28.668 81.644 78.858 1.00 18.67      C
ATOM  11430 CD1 LEU C 449    29.337 82.783 79.629 1.00 20.33      C
ATOM  11434 CD2 LEU C 449    29.635 81.123 77.812 1.00 18.73      C
ATOM  11438 C   LEU C 449    27.085 78.365 80.390 1.00 16.30      C
ATOM  11439 O   LEU C 449    26.057 78.370 81.055 1.00 16.20      O
ATOM  11440 N   PRO C 450    28.045 77.461 80.551 1.00 14.39      N
ATOM  11441 CA  PRO C 450    28.007 76.492 81.634 1.00 13.54      C
ATOM  11443 CB  PRO C 450    28.971 75.405 81.153 1.00 13.19      C
ATOM  11446 CG  PRO C 450    29.946 76.115 80.341 1.00 13.88      C
ATOM  11449 CD  PRO C 450    29.242 77.273 79.717 1.00 14.55      C
ATOM  11452 C   PRO C 450    28.494 77.134 82.922 1.00 13.00      C
ATOM  11453 O   PRO C 450    29.233 78.116 82.862 1.00 12.36      O
ATOM  11454 N   PRO C 451    28.119 76.569 84.064 1.00 12.74      N
ATOM  11455 CA  PRO C 451    28.390 77.181 85.377 1.00 13.15      C
ATOM  11457 CB  PRO C 451    28.197 76.012 86.336 1.00 12.67      C
ATOM  11460 CG  PRO C 451    27.162 75.186 85.671 1.00 12.39      C
ATOM  11463 CD  PRO C 451    27.439 75.269 84.197 1.00 12.16      C
ATOM  11466 C   PRO C 451    29.772 77.833 85.611 1.00 14.02      C
ATOM  11467 O   PRO C 451    29.823 78.916 86.195 1.00 13.72      O
ATOM  11468 N   LEU C 452    30.867 77.208 85.183 1.00 14.95      N
ATOM  11470 CA  LEU C 452    32.181 77.737 85.516 1.00 15.64      C
ATOM  11472 CB  LEU C 452    33.287 76.744 85.169 1.00 16.26      C
ATOM  11475 CG  LEU C 452    34.560 77.001 86.002 1.00 19.48      C
ATOM  11477 CD1 LEU C 452    34.435 76.290 87.347 1.00 21.20      C
ATOM  11481 CD2 LEU C 452    35.849 76.582 85.298 1.00 21.90      C
ATOM  11485 C   LEU C 452    32.454 79.050 84.810 1.00 15.44      C
ATOM  11486 O   LEU C 452    33.200 79.885 85.315 1.00 15.20      O
ATOM  11487 N   LEU C 453    31.882 79.190 83.618 1.00 15.57      N
ATOM  11489 CA  LEU C 453    32.088 80.352 82.774 1.00 15.79      C
ATOM  11491 CB  LEU C 453    32.095 79.949 81.291 1.00 15.70      C
ATOM  11494 CG  LEU C 453    33.186 78.997 80.762 1.00 14.82      C
ATOM  11496 CD1 LEU C 453    33.164 78.838 79.217 1.00 14.87      C
ATOM  11500 CD2 LEU C 453    34.546 79.476 81.193 1.00 15.29      C
ATOM  11504 C   LEU C 453    31.000 81.371 83.009 1.00 16.75      C
ATOM  11505 O   LEU C 453    31.170 82.565 82.744 1.00 16.28      O
ATOM  11506 N   SER C 454    29.864 80.893 83.497 1.00 18.15      N
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ATOM  11508 CA  SER C 454      28.758 81.777 83.832 1.00 19.00        C
ATOM  11510 CB  SER C 454      27.495 80.975 84.056 1.00 18.44        C
ATOM  11513 OG  SER C 454      26.560 81.783 84.708 1.00 18.44        O
ATOM  11515 C   SER C 454      29.094 82.637 85.065 1.00 20.30        C
ATOM  11516 O   SER C 454      28.771 83.825 85.101 1.00 20.38        O
ATOM  11517 N   GLU C 455      29.771 82.055 86.057 1.00 21.99        N
ATOM  11519 CA  GLU C 455      30.186 82.805 87.242 1.00 23.44        C
ATOM  11521 CB  GLU C 455      31.020 81.935 88.193 1.00 24.37        C
ATOM  11524 CG  GLU C 455      31.392 82.607 89.521 1.00 27.84        C
ATOM  11527 CD  GLU C 455      30.268 82.622 90.581 1.00 32.12        C
ATOM  11528 OE1 GLU C 455      29.127 82.143 90.322 1.00 34.44        O
ATOM  11529 OE2 GLU C 455      30.541 83.124 91.705 1.00 35.01        O
ATOM  11530 C   GLU C 455      30.993 84.008 86.802 1.00 23.44        C
ATOM  11531 O   GLU C 455      30.777 85.112 87.282 1.00 23.21        O
ATOM  11532 N   ILE C 456      31.910 83.788 85.866 1.00 24.06        N
ATOM  11534 CA  ILE C 456      32.804 84.853 85.416 1.00 24.51        C
ATOM  11536 CB  ILE C 456      34.000 84.334 84.600 1.00 24.80        C
ATOM  11538 CG1 ILE C 456      34.763 83.221 85.304 1.00 25.39        C
ATOM  11541 CD1 ILE C 456      35.648 82.435 84.325 1.00 26.47        C
ATOM  11545 CG2 ILE C 456      34.976 85.449 84.402 1.00 26.30        C
ATOM  11549 C   ILE C 456      32.103 85.903 84.571 1.00 24.01        C
ATOM  11550 O   ILE C 456      32.354 87.069 84.791 1.00 24.09        O
ATOM  11551 N   TRP C 457      31.239 85.491 83.634 1.00 23.70        N
ATOM  11553 CA  TRP C 457      30.848 86.330 82.487 1.00 23.66        C
ATOM  11555 CB  TRP C 457      31.240 85.660 81.163 1.00 22.92        C
ATOM  11558 CG  TRP C 457      32.702 85.571 80.944 1.00 21.92        C
ATOM  11559 CD1 TRP C 457      33.641 86.438 81.379 1.00 21.53        C
ATOM  11561 NE1 TRP C 457      34.889 86.017 81.000 1.00 21.44        N
ATOM  11563 CE2 TRP C 457      34.770 84.852 80.299 1.00 20.54        C
ATOM  11564 CD2 TRP C 457      33.410 84.535 80.249 1.00 21.29        C
ATOM  11565 CE3 TRP C 457      33.021 83.361 79.577 1.00 21.81        C
ATOM  11567 CZ3 TRP C 457      33.995 82.561 78.984 1.00 20.80        C
ATOM  11569 CH2 TRP C 457      35.342 82.912 79.050 1.00 22.02        C
ATOM  11571 CZ2 TRP C 457      35.752 84.054 79.706 1.00 21.84        C
ATOM  11573 C   TRP C 457      29.383 86.772 82.376 1.00 24.59        C
ATOM  11574 O   TRP C 457      29.107 87.719 81.658 1.00 25.61        O
ATOM  11575 N   ASP C 458      28.440 86.136 83.051 1.00 25.15        N
ATOM  11577 CA  ASP C 458      27.042 86.483 82.822 1.00 25.63        C
ATOM  11579 CB  ASP C 458      26.113 85.302 83.133 1.00 25.67        C
ATOM  11582 CG  ASP C 458      26.092 84.253 82.027 1.00 25.36        C
ATOM  11583 OD1 ASP C 458      25.897 84.555 80.820 1.00 24.47        O
ATOM  11584 OD2 ASP C 458      26.240 83.062 82.305 1.00 26.12        O
ATOM  11585 C   ASP C 458      26.676 87.673 83.676 1.00 26.06        C
ATOM  11586 O   ASP C 458      27.023 87.696 84.848 1.00 27.02        O
ATOM  11587 O13 444 C 500      39.286 80.254 75.403 1.00 48.16        O
ATOM  11588 S12 444 C 500      39.775 80.845 74.203 1.00 46.50        S
ATOM  11589 O14 444 C 500      41.215 81.038 74.217 1.00 48.57        O
ATOM  11590 C01 444 C 500      39.451 79.745 72.851 1.00 48.48        C
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ATOM 11591 C02 444 C 500    40.471 79.528 71.857 1.00 50.39         C
ATOM 11593 C03 444 C 500    40.204 78.677 70.760 1.00 51.15         C
ATOM 11595 C04 444 C 500    38.934 78.063 70.652 1.00 51.42         C
ATOM 11597 C05 444 C 500    37.927 78.301 71.643 1.00 51.23         C
ATOM 11599 C06 444 C 500    38.173 79.156 72.744 1.00 49.18         C
ATOM 11601 N15 444 C 500    38.849 82.286 73.738 1.00 37.44         N
ATOM 11602 C16 444 C 500    39.244 82.987 72.414 1.00 34.73         C
ATOM 11605 C19 444 C 500    39.453 84.483 72.598 1.00 33.95         C
ATOM 11606 F22 444 C 500    39.958 85.057 71.481 1.00 32.52         F
ATOM 11607 F21 444 C 500    40.295 84.801 73.592 1.00 32.47         F
ATOM 11608 F20 444 C 500    38.313 85.094 72.919 1.00 33.30         F
ATOM 11609 C23 444 C 500    37.374 82.286 73.914 1.00 30.68         C
ATOM 11610 C24 444 C 500    36.883 82.707 75.167 1.00 27.90         C
ATOM 11612 C25 444 C 500    35.501 82.756 75.423 1.00 25.92         C
ATOM 11614 C28 444 C 500    36.428 81.910 72.894 1.00 27.94         C
ATOM 11616 C27 444 C 500    35.038 81.954 73.152 1.00 24.86         C
ATOM 11618 C26 444 C 500    34.531 82.386 74.419 1.00 23.01         C
ATOM 11619 C33 444 C 500    33.039 82.455 74.834 1.00 21.39         C
ATOM 11620 C34 444 C 500    32.127 83.103 73.773 1.00 23.09         C
ATOM 11621 F36 444 C 500    30.827 83.196 74.160 1.00 25.25         F
ATOM 11622 F37 444 C 500    32.501 84.349 73.501 1.00 24.47         F
ATOM 11623 F35 444 C 500    32.176 82.499 72.577 1.00 23.98         F
ATOM 11624 O42 444 C 500    32.816 83.068 76.132 1.00 19.34         O
ATOM 11626 C38 444 C 500    32.555 81.023 75.003 1.00 21.35         C
ATOM 11627 F39 444 C 500    33.054 80.224 74.045 1.00 20.88         F
ATOM 11628 F40 444 C 500    33.018 80.546 76.167 1.00 22.16         F
ATOM 11629 F41 444 C 500    31.227 80.824 75.072 1.00 22.76         F
ATOM 11630 N   LEU D 220    64.184 118.262 74.238 1.00 20.17         N
ATOM 11632 CA  LEU D 220    63.239 118.118 73.082 1.00 20.68         C
ATOM 11634 CB  LEU D 220    61.787 118.487 73.472 1.00 20.83         C
ATOM 11637 CG  LEU D 220    61.091 117.814 74.673 1.00 22.88         C
ATOM 11639 CD1 LEU D 220    60.214 118.775 75.506 1.00 23.53         C
ATOM 11643 CD2 LEU D 220    60.242 116.601 74.204 1.00 24.10         C
ATOM 11647 C   LEU D 220    63.630 118.974 71.849 1.00 20.24         C
ATOM 11648 O   LEU D 220    64.231 120.062 71.943 1.00 19.45         O
ATOM 11651 N   THR D 221    63.204 118.463 70.699 1.00 20.07         N
ATOM 11653 CA  THR D 221    63.367 119.110 69.398 1.00 19.70         C
ATOM 11655 CB  THR D 221    63.137 118.039 68.248 1.00 19.86         C
ATOM 11657 OG1 THR D 221    61.778 117.533 68.250 1.00 17.93         O
ATOM 11659 CG2 THR D 221    64.002 116.776 68.470 1.00 19.27         C
ATOM 11663 C   THR D 221    62.381 120.275 69.233 1.00 19.83         C
ATOM 11664 O   THR D 221    61.242 120.214 69.745 1.00 19.99         O
ATOM 11665 N   ALA D 222    62.794 121.315 68.501 1.00 19.56         N
ATOM 11667 CA  ALA D 222    61.877 122.401 68.071 1.00 19.50         C
ATOM 11669 CB  ALA D 222    62.496 123.189 66.914 1.00 19.19         C
ATOM 11673 C   ALA D 222    60.474 121.901 67.654 1.00 19.70         C
ATOM 11674 O   ALA D 222    59.453 122.539 67.958 1.00 19.07         O
ATOM 11675 N   ALA D 223    60.460 120.770 66.946 1.00 19.78         N
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| ATOM | 11677 | CA | ALA | D | 223 | 59.254 | 120.239 | 66.365 | 1.00 | 20.35 | C |
|------|-------|-----|------|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 11679 | CB | ALA | D | 223 | 59.617 | 119.252 | 65.263 | 1.00 | 20.37 | C |
| ATOM | 11683 | C | ALA | D | 223 | 58.373 | 119.569 | 67.428 | 1.00 | 21.69 | C |
| ATOM | 11684 | O | ALA | D | 223 | 57.144 | 119.455 | 67.248 | 1.00 | 22.25 | O |
| ATOM | 11685 | N | GLN | D | 224 | 58.989 | 119.090 | 68.519 | 1.00 | 22.23 | N |
| ATOM | 11687 | CA | GLN | D | 224 | 58.235 | 118.471 | 69.621 | 1.00 | 22.06 | C |
| ATOM | 11689 | CB | GLN | D | 224 | 59.127 | 117.536 | 70.420 | 1.00 | 22.22 | C |
| ATOM | 11692 | CG | GLN | D | 224 | 59.198 | 116.092 | 69.897 | 1.00 | 21.63 | C |
| ATOM | 11695 | CD | GLN | D | 224 | 60.211 | 115.250 | 70.715 | 1.00 | 20.75 | C |
| ATOM | 11696 | OE1 | GLN | D | 224 | 61.304 | 115.751 | 71.089 | 1.00 | 17.25 | O |
| ATOM | 11697 | NE2 | GLN | D | 224 | 59.845 | 113.985 | 71.000 | 1.00 | 19.61 | N |
| ATOM | 11700 | C | GLN | D | 224 | 57.661 | 119.565 | 70.533 | 1.00 | 22.14 | C |
| ATOM | 11701 | O | GLN | D | 224 | 56.567 | 119.426 | 71.084 | 1.00 | 21.67 | O |
| ATOM | 11702 | N | GLU | D | 225 | 58.410 | 120.650 | 70.662 | 1.00 | 22.21 | N |
| ATOM | 11704 | CA | GLU | D | 225 | 57.931 | 121.845 | 71.327 | 1.00 | 22.89 | C |
| ATOM | 11706 | CB | GLU | D | 225 | 59.041 | 122.868 | 71.392 | 1.00 | 23.15 | C |
| ATOM | 11709 | CG | GLU | D | 225 | 60.227 | 122.424 | 72.216 | 1.00 | 25.60 | C |
| ATOM | 11712 | CD | GLU | D | 225 | 60.197 | 123.017 | 73.609 | 1.00 | 28.92 | C |
| ATOM | 11713 | OE1 | GLU | D | 225 | 59.079 | 123.047 | 74.201 | 1.00 | 30.22 | O |
| ATOM | 11714 | OE2 | GLU | D | 225 | 61.285 | 123.459 | 74.087 | 1.00 | 30.46 | O |
| ATOM | 11715 | C | GLU | D | 225 | 56.774 | 122.484 | 70.576 | 1.00 | 23.00 | C |
| ATOM | 11716 | O | GLU | D | 225 | 55.854 | 123.014 | 71.190 | 1.00 | 23.62 | O |
| ATOM | 11717 | N | LEU | D | 226 | 56.839 | 122.478 | 69.246 | 1.00 | 22.91 | N |
| ATOM | 11719 | CA | LEU | D | 226 | 55.791 | 123.087 | 68.419 | 1.00 | 22.54 | C |
| ATOM | 11721 | CB | LEU | D | 226 | 56.160 | 123.049 | 66.920 | 1.00 | 22.44 | C |
| ATOM | 11724 | CG | LEU | D | 226 | 55.179 | 123.602 | 65.874 | 1.00 | 21.51 | C |
| ATOM | 11726 | CD1 | LEU | D | 226 | 55.168 | 125.088 | 65.911 | 1.00 | 21.08 | C |
| ATOM | 11730 | CD2 | LEU | D | 226 | 55.530 | 123.149 | 64.472 | 1.00 | 21.32 | C |
| ATOM | 11734 | C | LEU | D | 226 | 54.524 | 122.298 | 68.684 | 1.00 | 22.31 | C |
| ATOM | 11735 | O | LEU | D | 226 | 53.482 | 122.859 | 68.991 | 1.00 | 21.87 | O |
| ATOM | 11736 | N | MET | D | 227 | 54.658 | 120.982 | 68.605 | 1.00 | 22.30 | N |
| ATOM | 11738 | CA | MET | D | 227 | 53.538 | 120.070 | 68.740 | 1.00 | 22.44 | C |
| ATOM | 11740 | CB | MET | D | 227 | 54.020 | 118.643 | 68.560 | 1.00 | 22.58 | C |
| ATOM | 11743 | CG | MET | D | 227 | 52.996 | 117.601 | 68.927 | 1.00 | 25.04 | C |
| ATOM | 11746 | SD | MET | D | 227 | 53.804 | 115.999 | 69.121 | 1.00 | 30.41 | S |
| ATOM | 11747 | CE | MET | D | 227 | 54.339 | 115.735 | 67.302 | 1.00 | 28.56 | C |
| ATOM | 11751 | C | MET | D | 227 | 52.872 | 120.209 | 70.088 | 1.00 | 21.96 | C |
| ATOM | 11752 | O | MET | D | 227 | 51.663 | 120.213 | 70.149 | 1.00 | 22.52 | O |
| ATOM | 11753 | N | ILE | D | 228 | 53.663 | 120.324 | 71.158 | 1.00 | 21.49 | N |
| ATOM | 11755 | CA | ILE | D | 228 | 53.147 | 120.394 | 72.530 | 1.00 | 20.69 | C |
| ATOM | 11757 | CB | ILE | D | 228 | 54.263 | 120.087 | 73.578 | 1.00 | 20.40 | C |
| ATOM | 11759 | CG1 | ILE | D | 228 | 54.718 | 118.623 | 73.467 | 1.00 | 19.82 | C |
| ATOM | 11762 | CD1 | ILE | D | 228 | 56.110 | 118.356 | 74.007 | 1.00 | 19.30 | C |
| ATOM | 11766 | CG2 | ILE | D | 228 | 53.753 | 120.351 | 74.990 | 1.00 | 19.35 | C |
| ATOM | 11770 | C | ILE | D | 228 | 52.506 | 121.740 | 72.823 | 1.00 | 20.46 | C |
| ATOM | 11771 | O | ILE | D | 228 | 51.410 | 121.802 | 73.339 | 1.00 | 20.39 | O |
| ATOM | 11772 | N | GLN | D | 229 | 53.192 | 122.814 | 72.480 | 1.00 | 20.51 | N |
| ATOM | 11774 | CA | GLN | D | 229 | 52.653 | 124.151 | 72.667 | 1.00 | 20.98 | C |

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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 11776 | CB | GLN D 229 | 53.689 | 125.192 | 72.259 | 1.00 | 21.36 | C |
| ATOM | 11779 | CG | GLN D 229 | 54.859 | 125.276 | 73.219 | 1.00 | 23.14 | C |
| ATOM | 11782 | CD | GLN D 229 | 55.856 | 126.348 | 72.835 | 1.00 | 25.43 | C |
| ATOM | 11783 | OE1 | GLN D 229 | 55.481 | 127.379 | 72.278 | 1.00 | 26.43 | O |
| ATOM | 11784 | NE2 | GLN D 229 | 57.127 | 126.117 | 73.147 | 1.00 | 26.80 | N |
| ATOM | 11787 | C | GLN D 229 | 51.385 | 124.356 | 71.862 | 1.00 | 20.82 | C |
| ATOM | 11788 | O | GLN D 229 | 50.497 | 125.119 | 72.250 | 1.00 | 20.41 | O |
| ATOM | 11789 | N | GLN D 230 | 51.304 | 123.665 | 70.732 | 1.00 | 20.92 | N |
| ATOM | 11791 | CA | GLN D 230 | 50.144 | 123.763 | 69.878 | 1.00 | 21.20 | C |
| ATOM | 11793 | CB | GLN D 230 | 50.355 | 123.070 | 68.529 | 1.00 | 21.82 | C |
| ATOM | 11796 | CG | GLN D 230 | 49.702 | 123.825 | 67.353 | 1.00 | 23.74 | C |
| ATOM | 11799 | CD | GLN D 230 | 48.367 | 123.253 | 67.014 | 1.00 | 26.14 | C |
| ATOM | 11800 | OE1 | GLN D 230 | 48.050 | 122.152 | 67.460 | 1.00 | 26.53 | O |
| ATOM | 11801 | NE2 | GLN D 230 | 47.572 | 123.986 | 66.215 | 1.00 | 28.27 | N |
| ATOM | 11804 | C | GLN D 230 | 48.973 | 123.165 | 70.578 | 1.00 | 20.57 | C |
| ATOM | 11805 | O | GLN D 230 | 47.949 | 123.806 | 70.692 | 1.00 | 20.72 | O |
| ATOM | 11806 | N | LEU D 231 | 49.134 | 121.937 | 71.060 | 1.00 | 20.16 | N |
| ATOM | 11808 | CA | LEU D 231 | 48.089 | 121.266 | 71.827 | 1.00 | 19.67 | C |
| ATOM | 11810 | CB | LEU D 231 | 48.559 | 119.871 | 72.246 | 1.00 | 19.77 | C |
| ATOM | 11813 | CG | LEU D 231 | 48.878 | 118.858 | 71.142 | 1.00 | 19.65 | C |
| ATOM | 11815 | CD1 | LEU D 231 | 49.388 | 117.583 | 71.789 | 1.00 | 18.59 | C |
| ATOM | 11819 | CD2 | LEU D 231 | 47.682 | 118.591 | 70.251 | 1.00 | 19.17 | C |
| ATOM | 11823 | C | LEU D 231 | 47.671 | 122.090 | 73.066 | 1.00 | 19.13 | C |
| ATOM | 11824 | O | LEU D 231 | 46.478 | 122.222 | 73.342 | 1.00 | 18.20 | O |
| ATOM | 11825 | N | VAL D 232 | 48.654 | 122.653 | 73.773 | 1.00 | 18.56 | N |
| ATOM | 11827 | CA | VAL D 232 | 48.404 | 123.362 | 75.012 | 1.00 | 18.84 | C |
| ATOM | 11829 | CB | VAL D 232 | 49.727 | 123.748 | 75.777 | 1.00 | 18.93 | C |
| ATOM | 11831 | CG1 | VAL D 232 | 49.454 | 124.704 | 76.948 | 1.00 | 17.92 | C |
| ATOM | 11835 | CG2 | VAL D 232 | 50.400 | 122.506 | 76.333 | 1.00 | 20.00 | C |
| ATOM | 11839 | C | VAL D 232 | 47.571 | 124.594 | 74.720 | 1.00 | 19.13 | C |
| ATOM | 11840 | O | VAL D 232 | 46.563 | 124.843 | 75.404 | 1.00 | 19.31 | O |
| ATOM | 11841 | N | ALA D 233 | 47.995 | 125.348 | 73.704 | 1.00 | 19.27 | N |
| ATOM | 11843 | CA | ALA D 233 | 47.355 | 126.586 | 73.291 | 1.00 | 19.37 | C |
| ATOM | 11845 | CB | ALA D 233 | 48.204 | 127.240 | 72.269 | 1.00 | 19.55 | C |
| ATOM | 11849 | C | ALA D 233 | 45.958 | 126.371 | 72.728 | 1.00 | 19.98 | C |
| ATOM | 11850 | O | ALA D 233 | 45.089 | 127.187 | 72.914 | 1.00 | 20.08 | O |
| ATOM | 11851 | N | ALA D 234 | 45.758 | 125.264 | 72.033 | 1.00 | 21.06 | N |
| ATOM | 11853 | CA | ALA D 234 | 44.474 | 124.889 | 71.456 | 1.00 | 22.23 | C |
| ATOM | 11855 | CB | ALA D 234 | 44.642 | 123.592 | 70.591 | 1.00 | 22.36 | C |
| ATOM | 11859 | C | ALA D 234 | 43.450 | 124.632 | 72.544 | 1.00 | 23.31 | C |
| ATOM | 11860 | O | ALA D 234 | 42.309 | 125.095 | 72.482 | 1.00 | 24.03 | O |
| ATOM | 11861 | N | GLN D 235 | 43.874 | 123.838 | 73.512 | 1.00 | 24.09 | N |
| ATOM | 11863 | CA | GLN D 235 | 43.114 | 123.529 | 74.699 | 1.00 | 24.90 | C |
| ATOM | 11865 | CB | GLN D 235 | 44.009 | 122.697 | 75.611 | 1.00 | 25.31 | C |
| ATOM | 11868 | CG | GLN D 235 | 43.341 | 122.166 | 76.838 | 1.00 | 26.35 | C |
| ATOM | 11871 | CD | GLN D 235 | 43.536 | 120.682 | 76.988 | 1.00 | 26.06 | C |
| ATOM | 11872 | OE1 | GLN D 235 | 44.651 | 120.189 | 76.890 | 1.00 | 25.19 | O |
| ATOM | 11873 | NE2 | GLN D 235 | 42.446 | 119.967 | 77.242 | 1.00 | 28.28 | N |

| ATOM | 11876 | C | GLN | D 235 | 42.686 124.780 75.425 1.00 25.24 | C |
| ATOM | 11877 | O | GLN | D 235 | 41.538 124.919 75.809 1.00 25.03 | O |
| ATOM | 11878 | N | LEU | D 236 | 43.628 125.689 75.599 1.00 26.10 | N |
| ATOM | 11880 | CA | LEU | D 236 | 43.390 126.942 76.297 1.00 27.26 | C |
| ATOM | 11882 | CB | LEU | D 236 | 44.722 127.668 76.471 1.00 27.42 | C |
| ATOM | 11885 | CG | LEU | D 236 | 44.745 128.873 77.398 1.00 27.58 | C |
| ATOM | 11887 | CD1 | LEU | D 236 | 44.605 128.433 78.835 1.00 28.10 | C |
| ATOM | 11891 | CD2 | LEU | D 236 | 46.041 129.627 77.178 1.00 28.09 | C |
| ATOM | 11895 | C | LEU | D 236 | 42.405 127.861 75.581 1.00 28.27 | C |
| ATOM | 11896 | O | LEU | D 236 | 41.637 128.566 76.228 1.00 28.34 | O |
| ATOM | 11897 | N | GLN | D 237 | 42.452 127.861 74.252 1.00 29.81 | N |
| ATOM | 11899 | CA | GLN | D 237 | 41.590 128.705 73.426 1.00 31.35 | C |
| ATOM | 11901 | CB | GLN | D 237 | 42.258 128.976 72.061 1.00 31.48 | C |
| ATOM | 11904 | CG | GLN | D 237 | 43.664 129.641 72.208 1.00 32.45 | C |
| ATOM | 11907 | CD | GLN | D 237 | 44.260 130.205 70.924 1.00 31.73 | C |
| ATOM | 11908 | OE1 | GLN | D 237 | 43.818 129.873 69.838 1.00 32.01 | O |
| ATOM | 11909 | NE2 | GLN | D 237 | 45.284 131.045 71.060 1.00 32.05 | N |
| ATOM | 11912 | C | GLN | D 237 | 40.183 128.123 73.246 1.00 32.76 | C |
| ATOM | 11913 | O | GLN | D 237 | 39.270 128.827 72.802 1.00 32.45 | O |
| ATOM | 11914 | N | CYS | D 238 | 40.016 126.844 73.594 1.00 34.75 | N |
| ATOM | 11916 | CA | CYS | D 238 | 38.725 126.156 73.503 1.00 36.55 | C |
| ATOM | 11918 | CB | CYS | D 238 | 38.940 124.656 73.302 1.00 36.77 | C |
| ATOM | 11921 | SG | CYS | D 238 | 39.390 124.234 71.597 1.00 39.71 | S |
| ATOM | 11922 | C | CYS | D 238 | 37.857 126.431 74.741 1.00 37.59 | C |
| ATOM | 11923 | O | CYS | D 238 | 36.641 126.626 74.628 1.00 37.65 | O |
| ATOM | 11924 | N | ASN | D 239 | 38.506 126.442 75.905 1.00 39.05 | N |
| ATOM | 11926 | CA | ASN | D 239 | 37.928 126.902 77.178 1.00 40.28 | C |
| ATOM | 11928 | CB | ASN | D 239 | 39.011 126.876 78.261 1.00 40.18 | C |
| ATOM | 11931 | CG | ASN | D 239 | 38.750 125.862 79.316 1.00 39.87 | C |
| ATOM | 11932 | OD1 | ASN | D 239 | 38.594 126.222 80.479 1.00 38.69 | O |
| ATOM | 11933 | ND2 | ASN | D 239 | 38.710 124.571 78.932 1.00 39.42 | N |
| ATOM | 11936 | C | ASN | D 239 | 37.351 128.324 77.125 1.00 41.84 | C |
| ATOM | 11937 | O | ASN | D 239 | 36.176 128.523 77.412 1.00 42.19 | O |
| ATOM | 11938 | N | LYS | D 240 | 38.197 129.304 76.794 1.00 43.61 | N |
| ATOM | 11940 | CA | LYS | D 240 | 37.783 130.711 76.662 1.00 45.18 | C |
| ATOM | 11942 | CB | LYS | D 240 | 38.901 131.563 76.017 1.00 45.40 | C |
| ATOM | 11945 | CG | LYS | D 240 | 40.076 131.903 76.939 1.00 46.18 | C |
| ATOM | 11948 | CD | LYS | D 240 | 40.872 133.129 76.457 1.00 46.88 | C |
| ATOM | 11951 | CE | LYS | D 240 | 42.395 132.894 76.551 1.00 47.30 | C |
| ATOM | 11954 | NZ | LYS | D 240 | 42.955 132.129 75.377 1.00 46.32 | N |
| ATOM | 11958 | C | LYS | D 240 | 36.516 130.833 75.808 1.00 46.26 | C |
| ATOM | 11959 | O | LYS | D 240 | 35.514 131.406 76.255 1.00 46.33 | O |
| ATOM | 11960 | N | ARG | D 241 | 36.600 130.284 74.583 1.00 47.51 | N |
| ATOM | 11962 | CA | ARG | D 241 | 35.486 130.183 73.604 1.00 48.07 | C |
| ATOM | 11964 | CB | ARG | D 241 | 35.823 129.102 72.528 1.00 48.22 | C |
| ATOM | 11967 | CG | ARG | D 241 | 34.952 129.071 71.245 1.00 48.46 | C |
| ATOM | 11970 | CD | ARG | D 241 | 35.512 129.840 70.020 1.00 48.76 | C |
| ATOM | 11973 | NE | ARG | D 241 | 34.509 130.762 69.449 1.00 49.21 | N |

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ATOM 11975 CZ  ARG D 241    34.720 131.636 68.452 1.00 48.77      C
ATOM 11976 NH1 ARG D 241    35.906 131.740 67.862 1.00 48.93      N
ATOM 11979 NH2 ARG D 241    33.727 132.418 68.041 1.00 48.40      N
ATOM 11982 C   ARG D 241    34.132 129.908 74.311 1.00 48.33      C
ATOM 11983 O   ARG D 241    33.081 130.399 73.859 1.00 48.47      O
ATOM 11984 N   SER D 242    34.183 129.135 75.410 1.00 48.36      N
ATOM 11986 CA  SER D 242    33.093 129.062 76.407 1.00 48.27      C
ATOM 11988 CB  SER D 242    32.845 127.612 76.863 1.00 48.06      C
ATOM 11991 OG  SER D 242    33.856 126.745 76.395 1.00 47.14      O
ATOM 11993 C   SER D 242    33.342 129.991 77.626 1.00 48.31      C
ATOM 11994 O   SER D 242    34.033 129.642 78.592 1.00 48.11      O
ATOM 11995 N   VAL D 249    22.728 129.089 80.179 1.00 27.32      N
ATOM 11997 CA  VAL D 249    22.676 127.776 80.822 1.00 27.70      C
ATOM 11999 CB  VAL D 249    24.089 127.310 81.263 1.00 27.90      C
ATOM 12001 CG1 VAL D 249    24.052 126.476 82.555 1.00 27.79      C
ATOM 12005 CG2 VAL D 249    24.771 126.513 80.139 1.00 28.41      C
ATOM 12009 C   VAL D 249    21.752 127.785 82.035 1.00 27.71      C
ATOM 12010 O   VAL D 249    21.708 128.764 82.778 1.00 27.82      O
ATOM 12011 N   THR D 250    21.055 126.669 82.251 1.00 27.63      N
ATOM 12013 CA  THR D 250    20.052 126.550 83.310 1.00 27.53      C
ATOM 12015 CB  THR D 250    19.260 125.242 83.156 1.00 27.53      C
ATOM 12017 OG1 THR D 250    18.840 125.082 81.799 1.00 27.43      O
ATOM 12019 CG2 THR D 250    17.959 125.284 83.951 1.00 27.68      C
ATOM 12023 C   THR D 250    20.709 126.563 84.687 1.00 27.51      C
ATOM 12024 O   THR D 250    21.724 125.885 84.890 1.00 27.39      O
ATOM 12025 N   PRO D 251    20.141 127.312 85.635 1.00 27.46      N
ATOM 12026 CA  PRO D 251    20.720 127.387 86.980 1.00 27.48      C
ATOM 12028 CB  PRO D 251    20.172 128.715 87.539 1.00 27.49      C
ATOM 12031 CG  PRO D 251    19.156 129.216 86.544 1.00 27.35      C
ATOM 12034 CD  PRO D 251    18.929 128.142 85.522 1.00 27.39      C
ATOM 12037 C   PRO D 251    20.334 126.198 87.867 1.00 27.56      C
ATOM 12038 O   PRO D 251    19.190 125.733 87.845 1.00 27.69      O
ATOM 12039 N   TRP D 252    21.313 125.725 88.634 1.00 27.62      N
ATOM 12041 CA  TRP D 252    21.182 124.581 89.549 1.00 27.55      C
ATOM 12043 CB  TRP D 252    22.278 124.691 90.628 1.00 27.55      C
ATOM 12046 CG  TRP D 252    22.524 123.453 91.445 1.00 27.48      C
ATOM 12047 CD1 TRP D 252    22.550 123.360 92.816 1.00 27.50      C
ATOM 12049 NE1 TRP D 252    22.819 122.066 93.197 1.00 27.51      N
ATOM 12051 CE2 TRP D 252    22.988 121.295 92.072 1.00 26.94      C
ATOM 12052 CD2 TRP D 252    22.809 122.137 90.952 1.00 26.92      C
ATOM 12053 CE3 TRP D 252    22.921 121.577 89.672 1.00 25.87      C
ATOM 12055 CZ3 TRP D 252    23.193 120.232 89.547 1.00 24.88      C
ATOM 12057 CH2 TRP D 252    23.359 119.422 90.674 1.00 25.44      C
ATOM 12059 CZ2 TRP D 252    23.269 119.930 91.944 1.00 25.75      C
ATOM 12061 C   TRP D 252    19.786 124.407 90.196 1.00 27.43      C
ATOM 12062 O   TRP D 252    19.248 125.312 90.836 1.00 27.03      O
ATOM 12063 N   ALA D 260    11.952 118.155 95.227 1.00 23.00      N
ATOM 12065 CA  ALA D 260    12.344 116.854 94.696 1.00 23.32      C
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| ATOM | 12067 | CB | ALA | D | 260 | 11.832 | 115.729 | 95.597 | 1.00 | 23.03 | C |
|------|-------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 12071 | C | ALA | D | 260 | 11.876 | 116.645 | 93.244 | 1.00 | 23.64 | C |
| ATOM | 12072 | O | ALA | D | 260 | 12.530 | 115.918 | 92.481 | 1.00 | 23.69 | O |
| ATOM | 12073 | N | ALA | D | 261 | 10.772 | 117.302 | 92.861 | 1.00 | 23.93 | N |
| ATOM | 12075 | CA | ALA | D | 261 | 10.134 | 117.103 | 91.542 | 1.00 | 24.02 | C |
| ATOM | 12077 | CB | ALA | D | 261 | 8.621 | 117.448 | 91.625 | 1.00 | 24.06 | C |
| ATOM | 12081 | C | ALA | D | 261 | 10.811 | 117.867 | 90.378 | 1.00 | 24.05 | C |
| ATOM | 12082 | O | ALA | D | 261 | 11.689 | 117.323 | 89.700 | 1.00 | 23.74 | O |
| ATOM | 12083 | N | ASP | D | 262 | 10.406 | 119.124 | 90.161 | 1.00 | 24.17 | N |
| ATOM | 12085 | CA | ASP | D | 262 | 10.994 | 119.991 | 89.121 | 1.00 | 24.14 | C |
| ATOM | 12087 | CB | ASP | D | 262 | 10.240 | 121.335 | 89.036 | 1.00 | 24.11 | C |
| ATOM | 12090 | CG | ASP | D | 262 | 8.859 | 121.204 | 88.403 | 1.00 | 24.03 | C |
| ATOM | 12091 | OD1 | ASP | D | 262 | 8.783 | 120.729 | 87.250 | 1.00 | 24.40 | O |
| ATOM | 12092 | OD2 | ASP | D | 262 | 7.801 | 121.556 | 88.973 | 1.00 | 22.47 | O |
| ATOM | 12093 | C | ASP | D | 262 | 12.487 | 120.270 | 89.353 | 1.00 | 24.08 | C |
| ATOM | 12094 | O | ASP | D | 262 | 13.148 | 120.862 | 88.498 | 1.00 | 24.02 | O |
| ATOM | 12095 | N | ALA | D | 263 | 12.995 | 119.863 | 90.519 | 1.00 | 24.08 | N |
| ATOM | 12097 | CA | ALA | D | 263 | 14.406 | 119.986 | 90.863 | 1.00 | 24.12 | C |
| ATOM | 12099 | CB | ALA | D | 263 | 14.605 | 119.827 | 92.363 | 1.00 | 24.05 | C |
| ATOM | 12103 | C | ALA | D | 263 | 15.235 | 118.953 | 90.116 | 1.00 | 24.31 | C |
| ATOM | 12104 | O | ALA | D | 263 | 16.154 | 119.316 | 89.388 | 1.00 | 24.40 | O |
| ATOM | 12105 | N | ARG | D | 264 | 14.906 | 117.672 | 90.298 | 1.00 | 24.43 | N |
| ATOM | 12107 | CA | ARG | D | 264 | 15.637 | 116.571 | 89.645 | 1.00 | 24.41 | C |
| ATOM | 12109 | CB | ARG | D | 264 | 14.931 | 115.220 | 89.857 | 1.00 | 24.78 | C |
| ATOM | 12112 | CG | ARG | D | 264 | 15.219 | 114.559 | 91.207 | 1.00 | 26.41 | C |
| ATOM | 12115 | CD | ARG | D | 264 | 16.128 | 113.313 | 91.153 | 1.00 | 28.02 | C |
| ATOM | 12118 | NE | ARG | D | 264 | 15.936 | 112.468 | 92.338 | 1.00 | 29.58 | N |
| ATOM | 12120 | CZ | ARG | D | 264 | 16.344 | 112.768 | 93.581 | 1.00 | 30.11 | C |
| ATOM | 12121 | NH1 | ARG | D | 264 | 17.004 | 113.895 | 93.847 | 1.00 | 30.32 | N |
| ATOM | 12124 | NH2 | ARG | D | 264 | 16.099 | 111.919 | 94.574 | 1.00 | 30.11 | N |
| ATOM | 12127 | C | ARG | D | 264 | 15.786 | 116.812 | 88.157 | 1.00 | 23.72 | C |
| ATOM | 12128 | O | ARG | D | 264 | 16.872 | 116.650 | 87.618 | 1.00 | 23.74 | O |
| ATOM | 12129 | N | GLN | D | 265 | 14.686 | 117.204 | 87.514 | 1.00 | 23.03 | N |
| ATOM | 12131 | CA | GLN | D | 265 | 14.637 | 117.457 | 86.071 | 1.00 | 22.54 | C |
| ATOM | 12133 | CB | GLN | D | 265 | 13.273 | 118.023 | 85.671 | 1.00 | 22.69 | C |
| ATOM | 12136 | CG | GLN | D | 265 | 12.092 | 117.084 | 85.914 | 1.00 | 23.55 | C |
| ATOM | 12139 | CD | GLN | D | 265 | 11.692 | 116.289 | 84.682 | 1.00 | 24.35 | C |
| ATOM | 12140 | OE1 | GLN | D | 265 | 12.547 | 115.948 | 83.836 | 1.00 | 24.12 | O |
| ATOM | 12141 | NE2 | GLN | D | 265 | 10.391 | 115.972 | 84.582 | 1.00 | 23.27 | N |
| ATOM | 12144 | C | GLN | D | 265 | 15.674 | 118.475 | 85.669 | 1.00 | 21.78 | C |
| ATOM | 12145 | O | GLN | D | 265 | 16.368 | 118.314 | 84.667 | 1.00 | 21.44 | O |
| ATOM | 12146 | N | GLN | D | 266 | 15.744 | 119.532 | 86.469 | 1.00 | 20.95 | N |
| ATOM | 12148 | CA | GLN | D | 266 | 16.585 | 120.686 | 86.191 | 1.00 | 20.34 | C |
| ATOM | 12150 | CB | GLN | D | 266 | 16.051 | 121.911 | 86.942 | 1.00 | 20.32 | C |
| ATOM | 12153 | CG | GLN | D | 266 | 14.887 | 122.611 | 86.250 | 1.00 | 19.85 | C |
| ATOM | 12156 | CD | GLN | D | 266 | 14.876 | 124.095 | 86.515 | 1.00 | 19.30 | C |
| ATOM | 12157 | OE1 | GLN | D | 266 | 13.819 | 124.682 | 86.767 | 1.00 | 18.49 | O |
| ATOM | 12158 | NE2 | GLN | D | 266 | 16.054 | 124.712 | 86.462 | 1.00 | 18.45 | N |

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ATOM 12161 C   GLN D 266    18.060 120.493 86.534 1.00 19.81    C
ATOM 12162 O   GLN D 266    18.918 121.083 85.887 1.00 19.75    O
ATOM 12163 N   ARG D 267    18.367 119.707 87.558 1.00 19.26    N
ATOM 12165 CA  ARG D 267    19.760 119.484 87.928 1.00 18.91    C
ATOM 12167 CB  ARG D 267    19.875 118.831 89.307 1.00 18.86    C
ATOM 12170 CG  ARG D 267    19.368 119.716 90.458 1.00 19.30    C
ATOM 12173 CD  ARG D 267    20.088 119.498 91.791 1.00 19.49    C
ATOM 12176 NE  ARG D 267    19.276 119.747 92.990 1.00 19.05    N
ATOM 12178 CZ  ARG D 267    18.259 118.992 93.394 1.00 19.29    C
ATOM 12179 NH1 ARG D 267    17.879 117.927 92.698 1.00 19.93    N
ATOM 12182 NH2 ARG D 267    17.605 119.304 94.501 1.00 19.74    N
ATOM 12185 C   ARG D 267    20.372 118.607 86.850 1.00 18.71    C
ATOM 12186 O   ARG D 267    21.551 118.745 86.522 1.00 18.59    O
ATOM 12187 N   PHE D 268    19.540 117.732 86.281 1.00 18.40    N
ATOM 12189 CA  PHE D 268    19.941 116.860 85.186 1.00 18.11    C
ATOM 12191 CB  PHE D 268    18.951 115.694 85.016 1.00 17.95    C
ATOM 12194 CG  PHE D 268    19.275 114.814 83.856 1.00 17.37    C
ATOM 12195 CD1 PHE D 268    20.359 113.949 83.912 1.00 17.56    C
ATOM 12197 CE1 PHE D 268    20.693 113.154 82.823 1.00 17.07    C
ATOM 12199 CZ  PHE D 268    19.946 113.236 81.669 1.00 17.17    C
ATOM 12201 CE2 PHE D 268    18.865 114.109 81.602 1.00 16.96    C
ATOM 12203 CD2 PHE D 268    18.542 114.893 82.686 1.00 16.46    C
ATOM 12205 C   PHE D 268    20.098 117.636 83.865 1.00 18.05    C
ATOM 12206 O   PHE D 268    21.070 117.418 83.151 1.00 17.93    O
ATOM 12207 N   ALA D 269    19.159 118.534 83.547 1.00 17.95    N
ATOM 12209 CA  ALA D 269    19.231 119.343 82.316 1.00 17.76    C
ATOM 12211 CB  ALA D 269    17.983 120.183 82.140 1.00 17.62    C
ATOM 12215 C   ALA D 269    20.461 120.235 82.347 1.00 17.71    C
ATOM 12216 O   ALA D 269    21.244 120.267 81.404 1.00 17.51    O
ATOM 12217 N   HIS D 270    20.615 120.954 83.451 1.00 17.77    N
ATOM 12219 CA  HIS D 270    21.846 121.670 83.766 1.00 18.05    C
ATOM 12221 CB  HIS D 270    21.771 122.211 85.198 1.00 18.27    C
ATOM 12224 CG  HIS D 270    23.061 122.777 85.689 1.00 19.88    C
ATOM 12225 ND1 HIS D 270    23.591 123.949 85.199 1.00 21.95    N
ATOM 12227 CE1 HIS D 270    24.743 124.191 85.798 1.00 22.95    C
ATOM 12229 NE2 HIS D 270    24.975 123.223 86.664 1.00 21.99    N
ATOM 12231 CD2 HIS D 270    23.941 122.322 86.610 1.00 21.49    C
ATOM 12233 C   HIS D 270    23.122 120.815 83.569 1.00 17.75    C
ATOM 12234 O   HIS D 270    24.135 121.307 83.066 1.00 17.56    O
ATOM 12235 N   PHE D 271    23.075 119.546 83.959 1.00 17.53    N
ATOM 12237 CA  PHE D 271    24.208 118.640 83.727 1.00 17.53    C
ATOM 12239 CB  PHE D 271    24.053 117.315 84.477 1.00 17.68    C
ATOM 12242 CG  PHE D 271    24.873 117.217 85.731 1.00 18.67    C
ATOM 12243 CD1 PHE D 271    24.595 118.009 86.823 1.00 19.66    C
ATOM 12245 CE1 PHE D 271    25.339 117.902 87.997 1.00 20.35    C
ATOM 12247 CZ  PHE D 271    26.364 116.992 88.092 1.00 20.48    C
ATOM 12249 CE2 PHE D 271    26.649 116.183 87.019 1.00 20.74    C
ATOM 12251 CD2 PHE D 271    25.898 116.292 85.837 1.00 20.72    C
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 12253 | C | PHE D 271 | 24.379 | 118.341 | 82.244 | 1.00 | 17.14 | | C |
| ATOM | 12254 | O | PHE D 271 | 25.495 | 118.324 | 81.764 | 1.00 | 17.01 | | O |
| ATOM | 12255 | N | THR D 272 | 23.289 | 118.097 | 81.517 | 1.00 | 16.93 | | N |
| ATOM | 12257 | CA | THR D 272 | 23.401 | 117.786 | 80.092 | 1.00 | 16.56 | | C |
| ATOM | 12259 | CB | THR D 272 | 22.085 | 117.262 | 79.459 | 1.00 | 16.45 | | C |
| ATOM | 12261 | OG1 | THR D 272 | 21.036 | 118.214 | 79.635 | 1.00 | 15.61 | | O |
| ATOM | 12263 | CG2 | THR D 272 | 21.597 | 115.996 | 80.145 | 1.00 | 16.59 | | C |
| ATOM | 12267 | C | THR D 272 | 23.867 | 119.001 | 79.326 | 1.00 | 16.57 | | C |
| ATOM | 12268 | O | THR D 272 | 24.542 | 118.851 | 78.324 | 1.00 | 16.95 | | O |
| ATOM | 12269 | N | GLU D 273 | 23.535 | 120.198 | 79.801 | 1.00 | 16.50 | | N |
| ATOM | 12271 | CA | GLU D 273 | 23.917 | 121.417 | 79.103 | 1.00 | 16.38 | | C |
| ATOM | 12273 | CB | GLU D 273 | 23.079 | 122.612 | 79.561 | 1.00 | 16.60 | | C |
| ATOM | 12276 | CG | GLU D 273 | 21.660 | 122.628 | 79.000 | 1.00 | 16.17 | | C |
| ATOM | 12279 | CD | GLU D 273 | 20.769 | 123.645 | 79.687 | 1.00 | 16.15 | | C |
| ATOM | 12280 | OE1 | GLU D 273 | 21.252 | 124.749 | 79.990 | 1.00 | 16.02 | | O |
| ATOM | 12281 | OE2 | GLU D 273 | 19.582 | 123.346 | 79.921 | 1.00 | 15.92 | | O |
| ATOM | 12282 | C | GLU D 273 | 25.413 | 121.677 | 79.250 | 1.00 | 16.46 | | C |
| ATOM | 12283 | O | GLU D 273 | 26.048 | 122.023 | 78.272 | 1.00 | 17.15 | | O |
| ATOM | 12284 | N | LEU D 274 | 25.993 | 121.480 | 80.436 | 1.00 | 16.45 | | N |
| ATOM | 12286 | CA | LEU D 274 | 27.463 | 121.498 | 80.585 | 1.00 | 16.47 | | C |
| ATOM | 12288 | CB | LEU D 274 | 27.887 | 121.175 | 82.014 | 1.00 | 16.45 | | C |
| ATOM | 12291 | CG | LEU D 274 | 27.522 | 122.146 | 83.131 | 1.00 | 17.83 | | C |
| ATOM | 12293 | CD1 | LEU D 274 | 28.034 | 121.599 | 84.438 | 1.00 | 18.43 | | C |
| ATOM | 12297 | CD2 | LEU D 274 | 28.105 | 123.531 | 82.890 | 1.00 | 18.95 | | C |
| ATOM | 12301 | C | LEU D 274 | 28.139 | 120.488 | 79.658 | 1.00 | 16.34 | | C |
| ATOM | 12302 | O | LEU D 274 | 29.056 | 120.821 | 78.917 | 1.00 | 16.64 | | O |
| ATOM | 12303 | N | ALA D 275 | 27.682 | 119.244 | 79.720 | 1.00 | 16.06 | | N |
| ATOM | 12305 | CA | ALA D 275 | 28.155 | 118.196 | 78.827 | 1.00 | 15.87 | | C |
| ATOM | 12307 | CB | ALA D 275 | 27.343 | 116.937 | 79.055 | 1.00 | 15.82 | | C |
| ATOM | 12311 | C | ALA D 275 | 28.122 | 118.586 | 77.336 | 1.00 | 15.73 | | C |
| ATOM | 12312 | O | ALA D 275 | 28.977 | 118.147 | 76.585 | 1.00 | 15.15 | | O |
| ATOM | 12313 | N | ILE D 276 | 27.139 | 119.397 | 76.924 | 1.00 | 15.76 | | N |
| ATOM | 12315 | CA | ILE D 276 | 26.991 | 119.821 | 75.523 | 1.00 | 15.90 | | C |
| ATOM | 12317 | CB | ILE D 276 | 25.584 | 120.473 | 75.249 | 1.00 | 15.67 | | C |
| ATOM | 12319 | CG1 | ILE D 276 | 24.528 | 119.400 | 74.955 | 1.00 | 14.78 | | C |
| ATOM | 12322 | CD1 | ILE D 276 | 23.134 | 119.832 | 75.206 | 1.00 | 13.45 | | C |
| ATOM | 12326 | CG2 | ILE D 276 | 25.634 | 121.438 | 74.066 | 1.00 | 15.58 | | C |
| ATOM | 12330 | C | ILE D 276 | 28.102 | 120.799 | 75.177 | 1.00 | 16.67 | | C |
| ATOM | 12331 | O | ILE D 276 | 28.726 | 120.702 | 74.126 | 1.00 | 16.45 | | O |
| ATOM | 12332 | N | ILE D 277 | 28.322 | 121.758 | 76.067 | 1.00 | 17.62 | | N |
| ATOM | 12334 | CA | ILE D 277 | 29.462 | 122.661 | 75.960 | 1.00 | 18.37 | | C |
| ATOM | 12336 | CB | ILE D 277 | 29.518 | 123.635 | 77.180 | 1.00 | 18.49 | | C |
| ATOM | 12338 | CG1 | ILE D 277 | 28.612 | 124.842 | 76.952 | 1.00 | 17.80 | | C |
| ATOM | 12341 | CD1 | ILE D 277 | 28.175 | 125.500 | 78.222 | 1.00 | 17.69 | | C |
| ATOM | 12345 | CG2 | ILE D 277 | 30.957 | 124.099 | 77.457 | 1.00 | 18.88 | | C |
| ATOM | 12349 | C | ILE D 277 | 30.767 | 121.860 | 75.859 | 1.00 | 18.96 | | C |
| ATOM | 12350 | O | ILE D 277 | 31.598 | 122.169 | 75.026 | 1.00 | 19.51 | | O |
| ATOM | 12351 | N | SER D 278 | 30.955 | 120.845 | 76.698 | 1.00 | 19.34 | | N |

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ATOM 12353 CA  SER D 278   32.180 120.061 76.639 1.00 19.82        C
ATOM 12355 CB  SER D 278   32.177 118.950 77.690 1.00 19.87        C
ATOM 12358 OG  SER D 278   32.603 119.456 78.931 1.00 20.32        O
ATOM 12360 C   SER D 278   32.370 119.441 75.268 1.00 20.11        C
ATOM 12361 O   SER D 278   33.477 119.453 74.731 1.00 20.21        O
ATOM 12362 N   VAL D 279   31.285 118.894 74.723 1.00 20.55        N
ATOM 12364 CA  VAL D 279   31.323 118.140 73.476 1.00 21.04        C
ATOM 12366 CB  VAL D 279   29.945 117.520 73.142 1.00 21.27        C
ATOM 12368 CG1 VAL D 279   29.886 117.021 71.695 1.00 21.43        C
ATOM 12372 CG2 VAL D 279   29.657 116.394 74.083 1.00 21.87        C
ATOM 12376 C   VAL D 279   31.740 119.042 72.341 1.00 21.16        C
ATOM 12377 O   VAL D 279   32.469 118.620 71.457 1.00 21.05        O
ATOM 12378 N   GLN D 280   31.259 120.278 72.375 1.00 21.62        N
ATOM 12380 CA  GLN D 280   31.549 121.265 71.344 1.00 22.33        C
ATOM 12382 CB  GLN D 280   30.526 122.415 71.428 1.00 22.48        C
ATOM 12385 CG  GLN D 280   31.071 123.835 71.198 1.00 24.61        C
ATOM 12388 CD  GLN D 280   30.630 124.844 72.270 1.00 26.80        C
ATOM 12389 OE1 GLN D 280   29.492 125.353 72.230 1.00 27.38        O
ATOM 12390 NE2 GLN D 280   31.535 125.143 73.220 1.00 26.29        N
ATOM 12393 C   GLN D 280   33.027 121.735 71.465 1.00 22.39        C
ATOM 12394 O   GLN D 280   33.717 121.917 70.454 1.00 22.31        O
ATOM 12395 N   GLU D 281   33.492 121.905 72.708 1.00 22.30        N
ATOM 12397 CA  GLU D 281   34.896 122.230 73.038 1.00 22.00        C
ATOM 12399 CB  GLU D 281   35.091 122.375 74.575 1.00 21.87        C
ATOM 12402 CG  GLU D 281   34.897 123.780 75.148 1.00 21.96        C
ATOM 12405 CD  GLU D 281   35.016 123.853 76.670 1.00 22.51        C
ATOM 12406 OE1 GLU D 281   35.522 122.911 77.312 1.00 24.35        O
ATOM 12407 OE2 GLU D 281   34.597 124.871 77.242 1.00 22.76        O
ATOM 12408 C   GLU D 281   35.877 121.174 72.523 1.00 21.82        C
ATOM 12409 O   GLU D 281   37.006 121.501 72.122 1.00 21.34        O
ATOM 12410 N   ILE D 282   35.453 119.913 72.576 1.00 21.79        N
ATOM 12412 CA  ILE D 282   36.289 118.800 72.159 1.00 22.01        C
ATOM 12414 CB  ILE D 282   35.772 117.461 72.747 1.00 21.99        C
ATOM 12416 CG1 ILE D 282   35.959 117.470 74.259 1.00 22.50        C
ATOM 12419 CD1 ILE D 282   34.986 116.570 74.979 1.00 23.27        C
ATOM 12423 CG2 ILE D 282   36.494 116.248 72.121 1.00 20.81        C
ATOM 12427 C   ILE D 282   36.368 118.734 70.645 1.00 22.12        C
ATOM 12428 O   ILE D 282   37.413 118.378 70.122 1.00 22.28        O
ATOM 12429 N   VAL D 283   35.282 119.068 69.951 1.00 22.17        N
ATOM 12431 CA  VAL D 283   35.297 119.088 68.499 1.00 22.70        C
ATOM 12433 CB  VAL D 283   33.883 119.307 67.897 1.00 22.96        C
ATOM 12435 CG1 VAL D 283   33.956 119.665 66.436 1.00 22.97        C
ATOM 12439 CG2 VAL D 283   33.040 118.045 68.062 1.00 24.38        C
ATOM 12443 C   VAL D 283   36.283 120.163 68.037 1.00 22.61        C
ATOM 12444 O   VAL D 283   37.210 119.865 67.295 1.00 22.62        O
ATOM 12445 N   ASP D 284   36.088 121.392 68.512 1.00 22.66        N
ATOM 12447 CA  ASP D 284   36.959 122.533 68.215 1.00 22.70        C
ATOM 12449 CB  ASP D 284   36.633 123.736 69.115 1.00 22.97        C
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ATOM 12452  CG  ASP D 284   35.339 124.424  68.740  1.00 23.36    C
ATOM 12453  OD1 ASP D 284   35.035 125.488  69.322  1.00 25.20    O
ATOM 12454  OD2 ASP D 284   34.549 123.964  67.897  1.00 24.52    O
ATOM 12455  C   ASP D 284   38.412 122.175  68.406  1.00 22.40    C
ATOM 12456  O   ASP D 284   39.231 122.440  67.554  1.00 23.22    O
ATOM 12457  N   PHE D 285   38.719 121.573  69.536  1.00 22.24    N
ATOM 12459  CA  PHE D 285   40.040 121.016  69.808  1.00 22.02    C
ATOM 12461  CB  PHE D 285   40.082 120.433  71.217  1.00 21.60    C
ATOM 12464  CG  PHE D 285   41.437 119.970  71.629  1.00 20.44    C
ATOM 12465  CD1 PHE D 285   42.418 120.872  71.940  1.00 20.37    C
ATOM 12467  CE1 PHE D 285   43.658 120.443  72.320  1.00 19.67    C
ATOM 12469  CZ  PHE D 285   43.933 119.132  72.385  1.00 18.57    C
ATOM 12471  CE2 PHE D 285   42.984 118.230  72.077  1.00 19.85    C
ATOM 12473  CD2 PHE D 285   41.740 118.639  71.691  1.00 20.07    C
ATOM 12475  C   PHE D 285   40.520 119.941  68.820  1.00 22.57    C
ATOM 12476  O   PHE D 285   41.611 120.086  68.279  1.00 23.04    O
ATOM 12477  N   ALA D 286   39.754 118.869  68.587  1.00 22.62    N
ATOM 12479  CA  ALA D 286   40.178 117.847  67.617  1.00 23.09    C
ATOM 12481  CB  ALA D 286   39.134 116.752  67.491  1.00 23.17    C
ATOM 12485  C   ALA D 286   40.513 118.405  66.219  1.00 23.54    C
ATOM 12486  O   ALA D 286   41.352 117.849  65.515  1.00 23.29    O
ATOM 12487  N   LYS D 287   39.852 119.497  65.833  1.00 23.97    N
ATOM 12489  CA  LYS D 287   40.030 120.100  64.525  1.00 24.53    C
ATOM 12491  CB  LYS D 287   38.860 121.077  64.177  1.00 25.33    C
ATOM 12494  CG  LYS D 287   37.481 120.465  63.567  1.00 27.96    C
ATOM 12497  CD  LYS D 287   37.368 118.867  63.694  1.00 32.35    C
ATOM 12500  CE  LYS D 287   35.911 118.136  63.551  1.00 33.10    C
ATOM 12503  NZ  LYS D 287   34.754 118.860  62.906  1.00 33.08    N
ATOM 12507  C   LYS D 287   41.399 120.800  64.479  1.00 24.04    C
ATOM 12508  O   LYS D 287   41.974 120.936  63.395  1.00 24.35    O
ATOM 12509  N   GLN D 288   41.919 121.225  65.641  1.00 23.24    N
ATOM 12511  CA  GLN D 288   43.290 121.804  65.768  1.00 22.64    C
ATOM 12513  CB  GLN D 288   43.377 122.829  66.910  1.00 22.82    C
ATOM 12516  CG  GLN D 288   42.381 123.965  66.878  1.00 23.86    C
ATOM 12519  CD  GLN D 288   42.710 124.969  65.844  1.00 26.39    C
ATOM 12520  OE1 GLN D 288   43.848 125.429  65.755  1.00 29.45    O
ATOM 12521  NE2 GLN D 288   41.729 125.323  65.041  1.00 27.81    N
ATOM 12524  C   GLN D 288   44.446 120.807  66.017  1.00 21.77    C
ATOM 12525  O   GLN D 288   45.604 121.213  65.961  1.00 21.00    O
ATOM 12526  N   VAL D 289   44.156 119.538  66.324  1.00 21.18    N
ATOM 12528  CA  VAL D 289   45.220 118.544  66.510  1.00 20.73    C
ATOM 12530  CB  VAL D 289   44.738 117.276  67.243  1.00 20.79    C
ATOM 12532  CG1 VAL D 289   45.885 116.238  67.403  1.00 19.29    C
ATOM 12536  CG2 VAL D 289   44.129 117.651  68.609  1.00 20.99    C
ATOM 12540  C   VAL D 289   45.789 118.159  65.143  1.00 20.90    C
ATOM 12541  O   VAL D 289   45.039 117.683  64.287  1.00 20.95    O
ATOM 12542  N   PRO D 290   47.091 118.396  64.912  1.00 20.70    N
ATOM 12543  CA  PRO D 290   47.705 118.003  63.647  1.00 20.51    C
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ATOM 12545 CB  PRO D 290    49.170 118.393 63.854 1.00 20.50      C
ATOM 12548 CG  PRO D 290    49.114 119.490 64.867 1.00 20.21      C
ATOM 12551 CD  PRO D 290    48.068 119.071 65.795 1.00 20.24      C
ATOM 12554 C   PRO D 290    47.537 116.501 63.361 1.00 21.20      C
ATOM 12555 O   PRO D 290    47.848 115.674 64.219 1.00 20.62      O
ATOM 12556 N   GLY D 291    47.026 116.169 62.171 1.00 22.22      N
ATOM 12558 CA  GLY D 291    46.806 114.792 61.762 1.00 22.96      C
ATOM 12561 C   GLY D 291    45.325 114.489 61.588 1.00 23.80      C
ATOM 12562 O   GLY D 291    44.927 113.845 60.601 1.00 24.45      O
ATOM 12563 N   PHE D 292    44.518 114.949 62.553 1.00 23.74      N
ATOM 12565 CA  PHE D 292    43.083 114.699 62.583 1.00 23.53      C
ATOM 12567 CB  PHE D 292    42.446 115.495 63.727 1.00 23.16      C
ATOM 12570 CG  PHE D 292    41.103 115.012 64.091 1.00 21.53      C
ATOM 12571 CD1 PHE D 292    40.955 113.843 64.802 1.00 22.59      C
ATOM 12573 CE1 PHE D 292    39.709 113.365 65.109 1.00 23.64      C
ATOM 12575 CZ  PHE D 292    38.581 114.057 64.686 1.00 22.30      C
ATOM 12577 CE2 PHE D 292    38.734 115.203 63.973 1.00 21.89      C
ATOM 12579 CD2 PHE D 292    39.989 115.678 63.677 1.00 21.09      C
ATOM 12581 C   PHE D 292    42.343 114.989 61.252 1.00 24.42      C
ATOM 12582 O   PHE D 292    41.609 114.121 60.744 1.00 23.56      O
ATOM 12583 N   LEU D 293    42.536 116.193 60.697 1.00 25.57      N
ATOM 12585 CA  LEU D 293    41.798 116.611 59.489 1.00 26.53      C
ATOM 12587 CB  LEU D 293    41.717 118.146 59.358 1.00 26.83      C
ATOM 12590 CG  LEU D 293    41.021 118.951 60.490 1.00 28.44      C
ATOM 12592 CD1 LEU D 293    41.363 120.447 60.419 1.00 29.31      C
ATOM 12596 CD2 LEU D 293    39.489 118.773 60.545 1.00 28.73      C
ATOM 12600 C   LEU D 293    42.361 115.993 58.202 1.00 26.86      C
ATOM 12601 O   LEU D 293    41.711 116.044 57.165 1.00 26.99      O
ATOM 12602 N   GLN D 294    43.553 115.404 58.277 1.00 27.57      N
ATOM 12604 CA  GLN D 294    44.088 114.555 57.195 1.00 28.18      C
ATOM 12606 CB  GLN D 294    45.650 114.549 57.221 1.00 29.08      C
ATOM 12609 CG  GLN D 294    46.375 113.374 57.995 1.00 29.83      C
ATOM 12612 CD  GLN D 294    47.882 113.628 58.254 1.00 31.21      C
ATOM 12613 OE1 GLN D 294    48.653 112.690 58.434 1.00 35.09      O
ATOM 12614 NE2 GLN D 294    48.277 114.878 58.300 1.00 31.40      N
ATOM 12617 C   GLN D 294    43.520 113.100 57.194 1.00 27.84      C
ATOM 12618 O   GLN D 294    43.881 112.296 56.330 1.00 27.73      O
ATOM 12619 N   LEU D 295    42.649 112.773 58.161 1.00 27.04      N
ATOM 12621 CA  LEU D 295    41.918 111.509 58.187 1.00 25.66      C
ATOM 12623 CB  LEU D 295    41.611 111.090 59.633 1.00 25.33      C
ATOM 12626 CG  LEU D 295    42.789 110.608 60.478 1.00 23.90      C
ATOM 12628 CD1 LEU D 295    42.330 110.230 61.882 1.00 22.76      C
ATOM 12632 CD2 LEU D 295    43.509 109.447 59.805 1.00 22.45      C
ATOM 12636 C   LEU D 295    40.630 111.676 57.409 1.00 25.12      C
ATOM 12637 O   LEU D 295    40.140 112.781 57.283 1.00 24.36      O
ATOM 12638 N   GLY D 296    40.078 110.571 56.912 1.00 24.98      N
ATOM 12640 CA  GLY D 296    38.788 110.591 56.251 1.00 25.23      C
ATOM 12643 C   GLY D 296    37.695 111.063 57.188 1.00 25.63      C
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|---|---|---|---|---|---|---|---|---|
| ATOM | 12644 | O | GLY D 296 | 37.828 | 110.926 | 58.383 | 1.00 26.10 | O |
| ATOM | 12645 | N | ARG D 297 | 36.606 | 111.620 | 56.665 | 1.00 26.28 | N |
| ATOM | 12647 | CA | ARG D 297 | 35.548 | 112.157 | 57.527 | 1.00 26.54 | C |
| ATOM | 12649 | CB | ARG D 297 | 34.434 | 112.786 | 56.700 | 1.00 26.90 | C |
| ATOM | 12652 | CG | ARG D 297 | 33.485 | 113.685 | 57.498 | 1.00 29.64 | C |
| ATOM | 12655 | CD | ARG D 297 | 32.206 | 114.073 | 56.720 | 1.00 33.39 | C |
| ATOM | 12658 | NE | ARG D 297 | 31.164 | 114.678 | 57.568 | 1.00 36.49 | N |
| ATOM | 12660 | CZ | ARG D 297 | 30.052 | 114.061 | 58.027 | 1.00 39.03 | C |
| ATOM | 12661 | NH1 | ARG D 297 | 29.786 | 112.775 | 57.750 | 1.00 39.92 | N |
| ATOM | 12664 | NH2 | ARG D 297 | 29.191 | 114.745 | 58.787 | 1.00 39.05 | N |
| ATOM | 12667 | C | ARG D 297 | 34.972 | 111.079 | 58.443 | 1.00 26.10 | C |
| ATOM | 12668 | O | ARG D 297 | 34.630 | 111.363 | 59.595 | 1.00 25.41 | O |
| ATOM | 12669 | N | GLU D 298 | 34.880 | 109.853 | 57.916 | 1.00 25.79 | N |
| ATOM | 12671 | CA | GLU D 298 | 34.324 | 108.709 | 58.638 | 1.00 25.76 | C |
| ATOM | 12673 | CB | GLU D 298 | 34.363 | 107.457 | 57.760 | 1.00 26.37 | C |
| ATOM | 12676 | CG | GLU D 298 | 33.086 | 106.639 | 57.739 | 1.00 28.91 | C |
| ATOM | 12679 | CD | GLU D 298 | 32.357 | 106.757 | 56.418 | 1.00 32.85 | C |
| ATOM | 12680 | OE1 | GLU D 298 | 31.774 | 107.844 | 56.148 | 1.00 35.69 | O |
| ATOM | 12681 | OE2 | GLU D 298 | 32.379 | 105.767 | 55.648 | 1.00 35.42 | O |
| ATOM | 12682 | C | GLU D 298 | 35.097 | 108.436 | 59.925 | 1.00 24.94 | C |
| ATOM | 12683 | O | GLU D 298 | 34.507 | 108.340 | 61.022 | 1.00 24.94 | O |
| ATOM | 12684 | N | ASP D 299 | 36.415 | 108.311 | 59.770 | 1.00 23.72 | N |
| ATOM | 12686 | CA | ASP D 299 | 37.321 | 108.057 | 60.884 | 1.00 22.63 | C |
| ATOM | 12688 | CB | ASP D 299 | 38.712 | 107.756 | 60.374 | 1.00 22.35 | C |
| ATOM | 12691 | CG | ASP D 299 | 38.857 | 106.328 | 59.985 | 1.00 23.42 | C |
| ATOM | 12692 | OD1 | ASP D 299 | 37.825 | 105.618 | 60.008 | 1.00 22.19 | O |
| ATOM | 12693 | OD2 | ASP D 299 | 39.950 | 105.818 | 59.649 | 1.00 27.24 | O |
| ATOM | 12694 | C | ASP D 299 | 37.385 | 109.175 | 61.883 | 1.00 21.89 | C |
| ATOM | 12695 | O | ASP D 299 | 37.517 | 108.919 | 63.058 | 1.00 21.49 | O |
| ATOM | 12696 | N | GLN D 300 | 37.307 | 110.415 | 61.421 | 1.00 21.38 | N |
| ATOM | 12698 | CA | GLN D 300 | 37.217 | 111.550 | 62.326 | 1.00 20.93 | C |
| ATOM | 12700 | CB | GLN D 300 | 37.044 | 112.846 | 61.538 | 1.00 20.99 | C |
| ATOM | 12703 | CG | GLN D 300 | 38.286 | 113.275 | 60.758 | 1.00 21.23 | C |
| ATOM | 12706 | CD | GLN D 300 | 38.076 | 114.518 | 59.908 | 1.00 18.90 | C |
| ATOM | 12707 | OE1 | GLN D 300 | 37.373 | 115.450 | 60.302 | 1.00 18.65 | O |
| ATOM | 12708 | NE2 | GLN D 300 | 38.696 | 114.529 | 58.747 | 1.00 17.75 | N |
| ATOM | 12711 | C | GLN D 300 | 36.017 | 111.354 | 63.232 | 1.00 20.70 | C |
| ATOM | 12712 | O | GLN D 300 | 36.083 | 111.596 | 64.438 | 1.00 20.60 | O |
| ATOM | 12713 | N | ILE D 301 | 34.911 | 110.922 | 62.629 | 1.00 20.41 | N |
| ATOM | 12715 | CA | ILE D 301 | 33.645 | 110.807 | 63.342 | 1.00 20.32 | C |
| ATOM | 12717 | CB | ILE D 301 | 32.430 | 110.539 | 62.342 | 1.00 20.75 | C |
| ATOM | 12719 | CG1 | ILE D 301 | 31.698 | 111.842 | 62.000 | 1.00 21.61 | C |
| ATOM | 12722 | CD1 | ILE D 301 | 31.071 | 111.821 | 60.585 | 1.00 23.12 | C |
| ATOM | 12726 | CG2 | ILE D 301 | 31.376 | 109.561 | 62.898 | 1.00 21.24 | C |
| ATOM | 12730 | C | ILE D 301 | 33.773 | 109.734 | 64.396 | 1.00 19.30 | C |
| ATOM | 12731 | O | ILE D 301 | 33.405 | 109.956 | 65.535 | 1.00 18.56 | O |
| ATOM | 12732 | N | ALA D 302 | 34.308 | 108.591 | 63.979 | 1.00 18.64 | N |
| ATOM | 12734 | CA | ALA D 302 | 34.464 | 107.424 | 64.811 | 1.00 18.49 | C |

| ATOM | 12736 | CB | ALA | D | 302 | 34.989 106.285 63.975 1.00 18.24 | C |
|------|-------|-----|-----|---|-----|-----|---|
| ATOM | 12740 | C | ALA | D | 302 | 35.392 107.675 66.004 1.00 18.94 | C |
| ATOM | 12741 | O | ALA | D | 302 | 35.089 107.258 67.112 1.00 19.46 | O |
| ATOM | 12742 | N | LEU | D | 303 | 36.514 108.359 65.779 1.00 19.14 | N |
| ATOM | 12744 | CA | LEU | D | 303 | 37.488 108.638 66.827 1.00 19.01 | C |
| ATOM | 12746 | CB | LEU | D | 303 | 38.767 109.255 66.259 1.00 18.59 | C |
| ATOM | 12749 | CG | LEU | D | 303 | 39.571 108.400 65.304 1.00 18.48 | C |
| ATOM | 12751 | CD1 | LEU | D | 303 | 40.776 109.135 64.828 1.00 18.54 | C |
| ATOM | 12755 | CD2 | LEU | D | 303 | 39.963 107.096 65.946 1.00 19.04 | C |
| ATOM | 12759 | C | LEU | D | 303 | 36.926 109.599 67.842 1.00 19.75 | C |
| ATOM | 12760 | O | LEU | D | 303 | 37.207 109.466 69.014 1.00 20.11 | O |
| ATOM | 12761 | N | LEU | D | 304 | 36.162 110.583 67.396 1.00 20.37 | N |
| ATOM | 12763 | CA | LEU | D | 304 | 35.606 111.578 68.302 1.00 21.24 | C |
| ATOM | 12765 | CB | LEU | D | 304 | 35.090 112.794 67.533 1.00 21.60 | C |
| ATOM | 12768 | CG | LEU | D | 304 | 36.047 113.963 67.403 1.00 22.91 | C |
| ATOM | 12770 | CD1 | LEU | D | 304 | 35.301 115.085 66.740 1.00 23.49 | C |
| ATOM | 12774 | CD2 | LEU | D | 304 | 36.599 114.368 68.770 1.00 23.75 | C |
| ATOM | 12778 | C | LEU | D | 304 | 34.450 111.005 69.082 1.00 21.38 | C |
| ATOM | 12779 | O | LEU | D | 304 | 34.229 111.379 70.230 1.00 21.95 | O |
| ATOM | 12780 | N | LYS | D | 305 | 33.690 110.124 68.449 1.00 21.59 | N |
| ATOM | 12782 | CA | LYS | D | 305 | 32.502 109.564 69.064 1.00 22.10 | C |
| ATOM | 12784 | CB | LYS | D | 305 | 31.758 108.677 68.078 1.00 22.53 | C |
| ATOM | 12787 | CG | LYS | D | 305 | 30.328 108.350 68.468 1.00 24.98 | C |
| ATOM | 12790 | CD | LYS | D | 305 | 29.521 107.812 67.266 1.00 27.56 | C |
| ATOM | 12793 | CE | LYS | D | 305 | 28.563 106.702 67.654 1.00 28.13 | C |
| ATOM | 12796 | NZ | LYS | D | 305 | 27.205 107.285 67.902 1.00 30.85 | N |
| ATOM | 12800 | C | LYS | D | 305 | 32.914 108.768 70.288 1.00 21.70 | C |
| ATOM | 12801 | O | LYS | D | 305 | 32.287 108.868 71.324 1.00 22.09 | O |
| ATOM | 12802 | N | ALA | D | 306 | 34.001 108.022 70.160 1.00 21.18 | N |
| ATOM | 12804 | CA | ALA | D | 306 | 34.567 107.235 71.239 1.00 20.90 | C |
| ATOM | 12806 | CB | ALA | D | 306 | 35.573 106.256 70.663 1.00 20.80 | C |
| ATOM | 12810 | C | ALA | D | 306 | 35.260 108.088 72.286 1.00 21.39 | C |
| ATOM | 12811 | O | ALA | D | 306 | 35.157 107.824 73.476 1.00 21.09 | O |
| ATOM | 12812 | N | SER | D | 307 | 35.992 109.098 71.824 1.00 21.92 | N |
| ATOM | 12814 | CA | SER | D | 307 | 36.969 109.802 72.650 1.00 22.50 | C |
| ATOM | 12816 | CB | SER | D | 307 | 37.996 110.563 71.787 1.00 22.64 | C |
| ATOM | 12819 | OG | SER | D | 307 | 39.257 109.880 71.824 1.00 25.98 | O |
| ATOM | 12821 | C | SER | D | 307 | 36.331 110.791 73.585 1.00 22.17 | C |
| ATOM | 12822 | O | SER | D | 307 | 36.852 111.052 74.661 1.00 22.21 | O |
| ATOM | 12823 | N | THR | D | 308 | 35.206 111.340 73.152 1.00 21.79 | N |
| ATOM | 12825 | CA | THR | D | 308 | 34.552 112.457 73.819 1.00 21.33 | C |
| ATOM | 12827 | CB | THR | D | 308 | 33.269 112.742 73.087 1.00 21.46 | C |
| ATOM | 12829 | OG1 | THR | D | 308 | 33.608 113.275 71.802 1.00 21.01 | O |
| ATOM | 12831 | CG2 | THR | D | 308 | 32.442 113.843 73.775 1.00 21.81 | C |
| ATOM | 12835 | C | THR | D | 308 | 34.288 112.248 75.304 1.00 21.10 | C |
| ATOM | 12836 | O | THR | D | 308 | 34.700 113.058 76.126 1.00 21.23 | O |
| ATOM | 12837 | N | ILE | D | 309 | 33.623 111.162 75.669 1.00 20.75 | N |
| ATOM | 12839 | CA | ILE | D | 309 | 33.423 110.900 77.087 1.00 20.29 | C |

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ATOM 12841 CB  ILE D 309    32.512 109.705 77.301 1.00 20.15        C
ATOM 12843 CG1 ILE D 309    32.088 109.627 78.769 1.00 20.44        C
ATOM 12846 CD1 ILE D 309    31.347 110.861 79.247 1.00 20.84        C
ATOM 12850 CG2 ILE D 309    33.208 108.413 76.873 1.00 20.07        C
ATOM 12854 C   ILE D 309    34.758 110.692 77.837 1.00 20.07        C
ATOM 12855 O   ILE D 309    34.842 111.020 79.042 1.00 20.47        O
ATOM 12856 N   GLU D 310    35.770 110.128 77.157 1.00 18.95        N
ATOM 12858 CA  GLU D 310    37.076 109.860 77.804 1.00 18.40        C
ATOM 12860 CB  GLU D 310    37.968 108.893 76.977 1.00 17.89        C
ATOM 12863 CG  GLU D 310    37.203 107.662 76.506 1.00 17.62        C
ATOM 12866 CD  GLU D 310    38.029 106.432 76.138 1.00 16.74        C
ATOM 12867 OE1 GLU D 310    39.275 106.441 76.130 1.00 17.83        O
ATOM 12868 OE2 GLU D 310    37.390 105.427 75.831 1.00 14.78        O
ATOM 12869 C   GLU D 310    37.787 111.189 78.103 1.00 17.84        C
ATOM 12870 O   GLU D 310    38.389 111.363 79.139 1.00 17.21        O
ATOM 12871 N   ILE D 311    37.648 112.133 77.188 1.00 17.97        N
ATOM 12873 CA  ILE D 311    38.274 113.445 77.287 1.00 18.00        C
ATOM 12875 CB  ILE D 311    38.215 114.184 75.891 1.00 17.94        C
ATOM 12877 CG1 ILE D 311    39.246 113.548 74.950 1.00 18.50        C
ATOM 12880 CD1 ILE D 311    39.166 114.008 73.462 1.00 18.54        C
ATOM 12884 CG2 ILE D 311    38.456 115.690 76.033 1.00 16.96        C
ATOM 12888 C   ILE D 311    37.601 114.257 78.390 1.00 17.89        C
ATOM 12889 O   ILE D 311    38.291 114.914 79.170 1.00 17.48        O
ATOM 12890 N   MET D 312    36.266 114.203 78.434 1.00 18.03        N
ATOM 12892 CA  MET D 312    35.460 114.829 79.497 1.00 18.46        C
ATOM 12894 CB  MET D 312    33.963 114.537 79.279 1.00 18.58        C
ATOM 12897 CG  MET D 312    33.336 115.223 78.107 1.00 19.01        C
ATOM 12900 SD  MET D 312    31.760 114.482 77.692 1.00 21.45        S
ATOM 12901 CE  MET D 312    30.718 115.688 78.243 1.00 23.95        C
ATOM 12905 C   MET D 312    35.836 114.286 80.874 1.00 18.48        C
ATOM 12906 O   MET D 312    35.800 114.994 81.877 1.00 18.43        O
ATOM 12907 N   LEU D 313    36.152 113.006 80.896 1.00 18.57        N
ATOM 12909 CA  LEU D 313    36.513 112.322 82.098 1.00 19.20        C
ATOM 12911 CB  LEU D 313    36.602 110.821 81.795 1.00 19.54        C
ATOM 12914 CG  LEU D 313    35.268 110.100 81.922 1.00 19.89        C
ATOM 12916 CD1 LEU D 313    35.355 108.731 81.246 1.00 21.07        C
ATOM 12920 CD2 LEU D 313    34.876 109.976 83.398 1.00 19.05        C
ATOM 12924 C   LEU D 313    37.849 112.830 82.567 1.00 19.34        C
ATOM 12925 O   LEU D 313    38.080 113.038 83.746 1.00 19.32        O
ATOM 12926 N   LEU D 314    38.737 112.989 81.608 1.00 19.77        N
ATOM 12928 CA  LEU D 314    40.102 113.411 81.842 1.00 20.55        C
ATOM 12930 CB  LEU D 314    40.856 113.304 80.522 1.00 20.62        C
ATOM 12933 CG  LEU D 314    42.241 112.700 80.428 1.00 21.87        C
ATOM 12935 CD1 LEU D 314    42.504 111.631 81.404 1.00 22.40        C
ATOM 12939 CD2 LEU D 314    42.390 112.175 79.014 1.00 23.96        C
ATOM 12943 C   LEU D 314    40.117 114.859 82.333 1.00 20.82        C
ATOM 12944 O   LEU D 314    40.898 115.226 83.202 1.00 20.41        O
ATOM 12945 N   GLU D 315    39.225 115.658 81.740 1.00 21.66        N
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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 12947 | CA | GLU | D | 315 | 39.062 | 117.085 | 82.029 | 1.00 21.96 | C |
| ATOM | 12949 | CB | GLU | D | 315 | 38.301 | 117.787 | 80.892 | 1.00 22.44 | C |
| ATOM | 12952 | CG | GLU | D | 315 | 39.159 | 118.050 | 79.651 | 1.00 25.65 | C |
| ATOM | 12955 | CD | GLU | D | 315 | 40.257 | 119.085 | 79.890 | 1.00 29.69 | C |
| ATOM | 12956 | OE1 | GLU | D | 315 | 39.934 | 120.148 | 80.471 | 1.00 32.41 | O |
| ATOM | 12957 | OE2 | GLU | D | 315 | 41.434 | 118.839 | 79.511 | 1.00 30.62 | O |
| ATOM | 12958 | C | GLU | D | 315 | 38.318 | 117.271 | 83.338 | 1.00 21.05 | C |
| ATOM | 12959 | O | GLU | D | 315 | 38.530 | 118.266 | 84.046 | 1.00 21.15 | O |
| ATOM | 12960 | N | THR | D | 316 | 37.451 | 116.312 | 83.651 | 1.00 19.95 | N |
| ATOM | 12962 | CA | THR | D | 316 | 36.697 | 116.323 | 84.895 | 1.00 19.30 | C |
| ATOM | 12964 | CB | THR | D | 316 | 35.616 | 115.211 | 84.871 | 1.00 18.81 | C |
| ATOM | 12966 | OG1 | THR | D | 316 | 34.491 | 115.641 | 84.096 | 1.00 16.74 | O |
| ATOM | 12968 | CG2 | THR | D | 316 | 35.022 | 114.957 | 86.258 | 1.00 18.57 | C |
| ATOM | 12972 | C | THR | D | 316 | 37.696 | 116.153 | 86.052 | 1.00 19.52 | C |
| ATOM | 12973 | O | THR | D | 316 | 37.687 | 116.924 | 87.042 | 1.00 19.17 | O |
| ATOM | 12974 | N | ALA | D | 317 | 38.578 | 115.166 | 85.872 | 1.00 19.45 | N |
| ATOM | 12976 | CA | ALA | D | 317 | 39.610 | 114.797 | 86.842 | 1.00 19.58 | C |
| ATOM | 12978 | CB | ALA | D | 317 | 40.431 | 113.613 | 86.299 | 1.00 19.72 | C |
| ATOM | 12982 | C | ALA | D | 317 | 40.533 | 115.956 | 87.133 | 1.00 19.30 | C |
| ATOM | 12983 | O | ALA | D | 317 | 40.906 | 116.205 | 88.274 | 1.00 18.64 | O |
| ATOM | 12984 | N | ARG | D | 318 | 40.886 | 116.633 | 86.047 | 1.00 19.70 | N |
| ATOM | 12986 | CA | ARG | D | 318 | 41.825 | 117.748 | 86.005 | 1.00 20.05 | C |
| ATOM | 12988 | CB | ARG | D | 318 | 41.897 | 118.209 | 84.552 | 1.00 20.24 | C |
| ATOM | 12991 | CG | ARG | D | 318 | 42.857 | 119.365 | 84.244 | 1.00 22.52 | C |
| ATOM | 12994 | CD | ARG | D | 318 | 42.898 | 119.694 | 82.750 | 1.00 24.07 | C |
| ATOM | 12997 | NE | ARG | D | 318 | 44.023 | 120.541 | 82.434 | 1.00 25.37 | N |
| ATOM | 12999 | CZ | ARG | D | 318 | 44.650 | 120.582 | 81.273 | 1.00 27.69 | C |
| ATOM | 13000 | NH1 | ARG | D | 318 | 44.284 | 119.804 | 80.261 | 1.00 29.30 | N |
| ATOM | 13003 | NH2 | ARG | D | 318 | 45.658 | 121.431 | 81.123 | 1.00 28.26 | N |
| ATOM | 13006 | C | ARG | D | 318 | 41.422 | 118.921 | 86.898 | 1.00 19.78 | C |
| ATOM | 13007 | O | ARG | D | 318 | 42.277 | 119.707 | 87.320 | 1.00 18.62 | O |
| ATOM | 13008 | N | ARG | D | 319 | 40.110 | 118.998 | 87.152 | 1.00 20.23 | N |
| ATOM | 13010 | CA | ARG | D | 319 | 39.430 | 120.077 | 87.865 | 1.00 20.95 | C |
| ATOM | 13012 | CB | ARG | D | 319 | 38.140 | 120.431 | 87.122 | 1.00 21.55 | C |
| ATOM | 13015 | CG | ARG | D | 319 | 38.327 | 120.791 | 85.656 | 1.00 24.18 | C |
| ATOM | 13018 | CD | ARG | D | 319 | 38.481 | 122.302 | 85.384 | 1.00 28.57 | C |
| ATOM | 13021 | NE | ARG | D | 319 | 38.068 | 122.655 | 84.029 | 1.00 31.34 | N |
| ATOM | 13023 | CZ | ARG | D | 319 | 38.648 | 122.190 | 82.929 | 1.00 34.77 | C |
| ATOM | 13024 | NH1 | ARG | D | 319 | 39.675 | 121.348 | 82.992 | 1.00 36.10 | N |
| ATOM | 13027 | NH2 | ARG | D | 319 | 38.193 | 122.558 | 81.745 | 1.00 37.68 | N |
| ATOM | 13030 | C | ARG | D | 319 | 39.035 | 119.718 | 89.295 | 1.00 20.60 | C |
| ATOM | 13031 | O | ARG | D | 319 | 38.483 | 120.551 | 90.020 | 1.00 20.22 | O |
| ATOM | 13032 | N | TYR | D | 320 | 39.317 | 118.479 | 89.682 | 1.00 20.75 | N |
| ATOM | 13034 | CA | TYR | D | 320 | 38.916 | 117.943 | 90.971 | 1.00 20.72 | C |
| ATOM | 13036 | CB | TYR | D | 320 | 39.061 | 116.422 | 90.978 | 1.00 20.70 | C |
| ATOM | 13039 | CG | TYR | D | 320 | 38.692 | 115.770 | 92.292 | 1.00 20.35 | C |
| ATOM | 13040 | CD1 | TYR | D | 320 | 37.376 | 115.469 | 92.591 | 1.00 19.94 | C |
| ATOM | 13042 | CE1 | TYR | D | 320 | 37.032 | 114.857 | 93.781 | 1.00 19.67 | C |

| ATOM | 13044 | CZ | TYR D 320 | 38.007 114.552 94.694 1.00 19.88 | C |
|------|-------|----|-----------|----------------------------------|---|
| ATOM | 13045 | OH | TYR D 320 | 37.652 113.950 95.881 1.00 20.01 | O |
| ATOM | 13047 | CE2 | TYR D 320 | 39.324 114.845 94.422 1.00 19.88 | C |
| ATOM | 13049 | CD2 | TYR D 320 | 39.661 115.442 93.224 1.00 20.15 | C |
| ATOM | 13051 | C | TYR D 320 | 39.741 118.546 92.101 1.00 20.94 | C |
| ATOM | 13052 | O | TYR D 320 | 40.968 118.564 92.056 1.00 20.78 | O |
| ATOM | 13053 | N | ASN D 321 | 39.022 119.013 93.111 1.00 21.28 | N |
| ATOM | 13055 | CA | ASN D 321 | 39.555 119.586 94.329 1.00 21.69 | C |
| ATOM | 13057 | CB | ASN D 321 | 38.626 120.746 94.733 1.00 21.83 | C |
| ATOM | 13060 | CG | ASN D 321 | 39.303 121.809 95.576 1.00 20.95 | C |
| ATOM | 13061 | OD1 | ASN D 321 | 39.061 122.995 95.390 1.00 19.43 | O |
| ATOM | 13062 | ND2 | ASN D 321 | 40.127 121.393 96.515 1.00 20.93 | N |
| ATOM | 13065 | C | ASN D 321 | 39.542 118.458 95.387 1.00 22.23 | C |
| ATOM | 13066 | O | ASN D 321 | 38.468 117.931 95.726 1.00 21.54 | O |
| ATOM | 13067 | N | HIS D 322 | 40.724 118.085 95.891 1.00 22.96 | N |
| ATOM | 13069 | CA | HIS D 322 | 40.818 117.021 96.900 1.00 23.77 | C |
| ATOM | 13071 | CB | HIS D 322 | 42.149 116.238 96.795 1.00 24.07 | C |
| ATOM | 13074 | CG | HIS D 322 | 42.101 114.884 97.456 1.00 25.78 | C |
| ATOM | 13075 | ND1 | HIS D 322 | 41.106 113.958 97.202 1.00 26.82 | N |
| ATOM | 13077 | CE1 | HIS D 322 | 41.309 112.878 97.935 1.00 26.95 | C |
| ATOM | 13079 | NE2 | HIS D 322 | 42.392 113.070 98.667 1.00 27.14 | N |
| ATOM | 13081 | CD2 | HIS D 322 | 42.902 114.319 98.393 1.00 26.71 | C |
| ATOM | 13083 | C | HIS D 322 | 40.538 117.501 98.354 1.00 23.63 | C |
| ATOM | 13084 | O | HIS D 322 | 40.309 116.683 99.256 1.00 23.64 | O |
| ATOM | 13085 | N | GLU D 323 | 40.532 118.817 98.561 1.00 23.40 | N |
| ATOM | 13087 | CA | GLU D 323 | 40.110 119.408 99.826 1.00 23.21 | C |
| ATOM | 13089 | CB | GLU D 323 | 40.597 120.851 99.929 1.00 23.45 | C |
| ATOM | 13092 | CG | GLU D 323 | 42.102 121.033 99.857 1.00 23.68 | C |
| ATOM | 13095 | CD | GLU D 323 | 42.808 120.540 101.104 1.00 24.52 | C |
| ATOM | 13096 | OE1 | GLU D 323 | 42.437 120.944 102.248 1.00 23.26 | O |
| ATOM | 13097 | OE2 | GLU D 323 | 43.748 119.744 100.914 1.00 24.55 | O |
| ATOM | 13098 | C | GLU D 323 | 38.590 119.418 99.949 1.00 22.98 | C |
| ATOM | 13099 | O | GLU D 323 | 38.043 119.013 100.970 1.00 22.89 | O |
| ATOM | 13100 | N | THR D 324 | 37.917 119.905 98.908 1.00 22.80 | N |
| ATOM | 13102 | CA | THR D 324 | 36.462 120.107 98.930 1.00 22.50 | C |
| ATOM | 13104 | CB | THR D 324 | 36.072 121.409 98.159 1.00 22.59 | C |
| ATOM | 13106 | OG1 | THR D 324 | 36.456 121.322 96.782 1.00 22.02 | O |
| ATOM | 13108 | CG2 | THR D 324 | 36.863 122.623 98.664 1.00 22.66 | C |
| ATOM | 13112 | C | THR D 324 | 35.689 118.910 98.372 1.00 22.31 | C |
| ATOM | 13113 | O | THR D 324 | 34.472 118.857 98.498 1.00 21.79 | O |
| ATOM | 13114 | N | GLU D 325 | 36.414 117.955 97.778 1.00 22.45 | N |
| ATOM | 13116 | CA | GLU D 325 | 35.851 116.735 97.156 1.00 22.39 | C |
| ATOM | 13118 | CB | GLU D 325 | 35.239 115.774 98.220 1.00 22.70 | C |
| ATOM | 13121 | CG | GLU D 325 | 36.033 115.582 99.525 1.00 23.36 | C |
| ATOM | 13124 | CD | GLU D 325 | 37.010 114.396 99.538 1.00 24.78 | C |
| ATOM | 13125 | OE1 | GLU D 325 | 37.499 114.040 100.635 1.00 25.95 | O |
| ATOM | 13126 | OE2 | GLU D 325 | 37.322 113.820 98.477 1.00 26.11 | O |
| ATOM | 13127 | C | GLU D 325 | 34.834 117.048 96.035 1.00 21.81 | C |

| ATOM | 13128 | O | GLU D 325 | 33.797 | 116.385 | 95.914 | 1.00 | 21.16 | O |
| ATOM | 13129 | N | CYS D 326 | 35.157 | 118.052 | 95.215 | 1.00 | 21.65 | N |
| ATOM | 13131 | CA | CYS D 326 | 34.253 | 118.552 | 94.164 | 1.00 | 21.65 | C |
| ATOM | 13133 | CB | CYS D 326 | 33.624 | 119.877 | 94.582 | 1.00 | 21.65 | C |
| ATOM | 13136 | SG | CYS D 326 | 32.795 | 119.862 | 96.151 | 1.00 | 20.33 | S |
| ATOM | 13137 | C | CYS D 326 | 34.934 | 118.851 | 92.850 | 1.00 | 21.87 | C |
| ATOM | 13138 | O | CYS D 326 | 36.047 | 119.355 | 92.836 | 1.00 | 21.29 | O |
| ATOM | 13139 | N | ILE D 327 | 34.223 | 118.615 | 91.751 | 1.00 | 22.65 | N |
| ATOM | 13141 | CA | ILE D 327 | 34.701 | 119.019 | 90.434 | 1.00 | 23.54 | C |
| ATOM | 13143 | CB | ILE D 327 | 34.214 | 118.084 | 89.352 | 1.00 | 23.59 | C |
| ATOM | 13145 | CG1 | ILE D 327 | 34.606 | 116.645 | 89.673 | 1.00 | 24.93 | C |
| ATOM | 13148 | CD1 | ILE D 327 | 33.411 | 115.715 | 89.709 | 1.00 | 26.49 | C |
| ATOM | 13152 | CG2 | ILE D 327 | 34.824 | 118.469 | 88.031 | 1.00 | 24.21 | C |
| ATOM | 13156 | C | ILE D 327 | 34.225 | 120.405 | 90.114 | 1.00 | 24.05 | C |
| ATOM | 13157 | O | ILE D 327 | 33.115 | 120.761 | 90.420 | 1.00 | 23.55 | O |
| ATOM | 13158 | N | THR D 328 | 35.078 | 121.152 | 89.432 | 1.00 | 25.57 | N |
| ATOM | 13160 | CA | THR D 328 | 34.907 | 122.584 | 89.221 | 1.00 | 26.70 | C |
| ATOM | 13162 | CB | THR D 328 | 36.032 | 123.326 | 89.998 | 1.00 | 26.94 | C |
| ATOM | 13164 | OG1 | THR D 328 | 36.042 | 122.900 | 91.376 | 1.00 | 26.95 | O |
| ATOM | 13166 | CG2 | THR D 328 | 35.787 | 124.845 | 90.035 | 1.00 | 27.12 | C |
| ATOM | 13170 | C | THR D 328 | 34.969 | 122.925 | 87.724 | 1.00 | 27.26 | C |
| ATOM | 13171 | O | THR D 328 | 35.959 | 123.493 | 87.259 | 1.00 | 27.63 | O |
| ATOM | 13172 | N | ALA D 329 | 33.905 | 122.575 | 86.992 | 1.00 | 27.70 | N |
| ATOM | 13174 | CA | ALA D 329 | 33.818 | 122.753 | 85.532 | 1.00 | 27.88 | C |
| ATOM | 13176 | CB | ALA D 329 | 32.506 | 122.163 | 84.995 | 1.00 | 27.77 | C |
| ATOM | 13180 | C | ALA D 329 | 33.937 | 124.212 | 85.116 | 1.00 | 27.79 | C |
| ATOM | 13181 | O | ALA D 329 | 33.417 | 125.089 | 85.788 | 1.00 | 28.03 | O |
| ATOM | 13182 | N | PHE D 333 | 30.476 | 127.084 | 90.472 | 1.00 | 24.39 | N |
| ATOM | 13184 | CA | PHE D 333 | 30.201 | 125.947 | 89.594 | 1.00 | 24.53 | C |
| ATOM | 13186 | CB | PHE D 333 | 30.414 | 126.341 | 88.126 | 1.00 | 24.62 | C |
| ATOM | 13189 | CG | PHE D 333 | 29.333 | 127.245 | 87.582 | 1.00 | 26.25 | C |
| ATOM | 13190 | CD1 | PHE D 333 | 28.349 | 126.745 | 86.729 | 1.00 | 26.75 | C |
| ATOM | 13192 | CE1 | PHE D 333 | 27.348 | 127.573 | 86.234 | 1.00 | 27.17 | C |
| ATOM | 13194 | CZ | PHE D 333 | 27.320 | 128.923 | 86.594 | 1.00 | 27.66 | C |
| ATOM | 13196 | CE2 | PHE D 333 | 28.291 | 129.435 | 87.450 | 1.00 | 27.27 | C |
| ATOM | 13198 | CD2 | PHE D 333 | 29.289 | 128.603 | 87.940 | 1.00 | 27.23 | C |
| ATOM | 13200 | C | PHE D 333 | 31.031 | 124.711 | 89.961 | 1.00 | 24.03 | C |
| ATOM | 13201 | O | PHE D 333 | 31.736 | 124.156 | 89.119 | 1.00 | 23.95 | O |
| ATOM | 13202 | N | THR D 334 | 30.938 | 124.296 | 91.227 | 1.00 | 23.60 | N |
| ATOM | 13204 | CA | THR D 334 | 31.488 | 123.015 | 91.690 | 1.00 | 23.28 | C |
| ATOM | 13206 | CB | THR D 334 | 32.364 | 123.166 | 92.979 | 1.00 | 23.36 | C |
| ATOM | 13208 | OG1 | THR D 334 | 31.534 | 123.368 | 94.135 | 1.00 | 22.00 | O |
| ATOM | 13210 | CG2 | THR D 334 | 33.275 | 124.392 | 92.916 | 1.00 | 23.52 | C |
| ATOM | 13214 | C | THR D 334 | 30.372 | 121.998 | 91.953 | 1.00 | 22.94 | C |
| ATOM | 13215 | O | THR D 334 | 29.252 | 122.372 | 92.288 | 1.00 | 23.01 | O |
| ATOM | 13216 | N | TYR D 335 | 30.699 | 120.714 | 91.816 | 1.00 | 22.58 | N |
| ATOM | 13218 | CA | TYR D 335 | 29.741 | 119.624 | 91.993 | 1.00 | 22.37 | C |
| ATOM | 13220 | CB | TYR D 335 | 29.286 | 119.078 | 90.631 | 1.00 | 22.28 | C |

| ATOM | 13223 | CG | TYR | D | 335 | 28.726 | 120.162 | 89.738 | 1.00 | 22.32 | C |
| ATOM | 13224 | CD1 | TYR | D | 335 | 29.543 | 120.858 | 88.865 | 1.00 | 22.00 | C |
| ATOM | 13226 | CE1 | TYR | D | 335 | 29.034 | 121.869 | 88.062 | 1.00 | 21.64 | C |
| ATOM | 13228 | CZ | TYR | D | 335 | 27.708 | 122.196 | 88.137 | 1.00 | 21.25 | C |
| ATOM | 13229 | OH | TYR | D | 335 | 27.223 | 123.193 | 87.340 | 1.00 | 21.55 | O |
| ATOM | 13231 | CE2 | TYR | D | 335 | 26.876 | 121.533 | 89.000 | 1.00 | 21.54 | C |
| ATOM | 13233 | CD2 | TYR | D | 335 | 27.386 | 120.523 | 89.799 | 1.00 | 22.31 | C |
| ATOM | 13235 | C | TYR | D | 335 | 30.379 | 118.518 | 92.818 | 1.00 | 22.12 | C |
| ATOM | 13236 | O | TYR | D | 335 | 31.382 | 117.931 | 92.404 | 1.00 | 22.18 | O |
| ATOM | 13237 | N | SER | D | 336 | 29.815 | 118.262 | 93.996 | 1.00 | 21.64 | N |
| ATOM | 13239 | CA | SER | D | 336 | 30.249 | 117.165 | 94.851 | 1.00 | 21.45 | C |
| ATOM | 13241 | CB | SER | D | 336 | 29.778 | 117.429 | 96.261 | 1.00 | 21.14 | C |
| ATOM | 13244 | OG | SER | D | 336 | 28.370 | 117.450 | 96.271 | 1.00 | 20.49 | O |
| ATOM | 13246 | C | SER | D | 336 | 29.646 | 115.839 | 94.375 | 1.00 | 21.75 | C |
| ATOM | 13247 | O | SER | D | 336 | 28.911 | 115.811 | 93.388 | 1.00 | 21.91 | O |
| ATOM | 13248 | N | LYS | D | 337 | 29.945 | 114.743 | 95.080 | 1.00 | 21.87 | N |
| ATOM | 13250 | CA | LYS | D | 337 | 29.284 | 113.451 | 94.832 | 1.00 | 21.71 | C |
| ATOM | 13252 | CB | LYS | D | 337 | 29.759 | 112.396 | 95.827 | 1.00 | 21.69 | C |
| ATOM | 13255 | CG | LYS | D | 337 | 30.993 | 111.632 | 95.402 | 1.00 | 22.07 | C |
| ATOM | 13258 | CD | LYS | D | 337 | 31.741 | 111.100 | 96.629 | 1.00 | 22.88 | C |
| ATOM | 13261 | CE | LYS | D | 337 | 32.805 | 110.094 | 96.242 | 1.00 | 23.03 | C |
| ATOM | 13264 | NZ | LYS | D | 337 | 32.220 | 108.758 | 95.963 | 1.00 | 23.33 | N |
| ATOM | 13268 | C | LYS | D | 337 | 27.766 | 113.581 | 94.944 | 1.00 | 21.72 | C |
| ATOM | 13269 | O | LYS | D | 337 | 27.023 | 113.113 | 94.082 | 1.00 | 21.42 | O |
| ATOM | 13270 | N | ASP | D | 338 | 27.322 | 114.228 | 96.021 | 1.00 | 21.83 | N |
| ATOM | 13272 | CA | ASP | D | 338 | 25.900 | 114.419 | 96.288 | 1.00 | 21.83 | C |
| ATOM | 13274 | CB | ASP | D | 338 | 25.697 | 115.180 | 97.604 | 1.00 | 21.84 | C |
| ATOM | 13277 | CG | ASP | D | 338 | 24.259 | 115.141 | 98.086 | 1.00 | 21.87 | C |
| ATOM | 13278 | OD1 | ASP | D | 338 | 23.753 | 116.180 | 98.580 | 1.00 | 21.66 | O |
| ATOM | 13279 | OD2 | ASP | D | 338 | 23.564 | 114.107 | 98.005 | 1.00 | 22.04 | O |
| ATOM | 13280 | C | ASP | D | 338 | 25.184 | 115.146 | 95.152 | 1.00 | 21.77 | C |
| ATOM | 13281 | O | ASP | D | 338 | 24.025 | 114.848 | 94.860 | 1.00 | 21.70 | O |
| ATOM | 13282 | N | ASP | D | 339 | 25.876 | 116.094 | 94.525 | 1.00 | 21.74 | N |
| ATOM | 13284 | CA | ASP | D | 339 | 25.298 | 116.899 | 93.449 | 1.00 | 21.88 | C |
| ATOM | 13286 | CB | ASP | D | 339 | 26.237 | 118.038 | 93.050 | 1.00 | 22.05 | C |
| ATOM | 13289 | CG | ASP | D | 339 | 26.329 | 119.120 | 94.091 | 1.00 | 21.96 | C |
| ATOM | 13290 | OD1 | ASP | D | 339 | 25.299 | 119.470 | 94.707 | 1.00 | 22.87 | O |
| ATOM | 13291 | OD2 | ASP | D | 339 | 27.405 | 119.692 | 94.339 | 1.00 | 22.06 | O |
| ATOM | 13292 | C | ASP | D | 339 | 25.003 | 116.080 | 92.203 | 1.00 | 21.86 | C |
| ATOM | 13293 | O | ASP | D | 339 | 24.007 | 116.314 | 91.526 | 1.00 | 21.72 | O |
| ATOM | 13294 | N | PHE | D | 340 | 25.888 | 115.146 | 91.879 | 1.00 | 21.93 | N |
| ATOM | 13296 | CA | PHE | D | 340 | 25.628 | 114.243 | 90.774 | 1.00 | 21.96 | C |
| ATOM | 13298 | CB | PHE | D | 340 | 26.787 | 113.275 | 90.563 | 1.00 | 21.67 | C |
| ATOM | 13301 | CG | PHE | D | 340 | 27.923 | 113.834 | 89.737 | 1.00 | 20.36 | C |
| ATOM | 13302 | CD1 | PHE | D | 340 | 28.533 | 115.031 | 90.078 | 1.00 | 18.74 | C |
| ATOM | 13304 | CE1 | PHE | D | 340 | 29.580 | 115.525 | 89.340 | 1.00 | 18.16 | C |
| ATOM | 13306 | CZ | PHE | D | 340 | 30.043 | 114.830 | 88.240 | 1.00 | 18.95 | C |
| ATOM | 13308 | CE2 | PHE | D | 340 | 29.459 | 113.620 | 87.883 | 1.00 | 18.94 | C |

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ATOM 13310 CD2 PHE D 340    28.406 113.130 88.633 1.00 19.62      C
ATOM 13312 C  PHE D 340     24.360 113.475 91.114 1.00 22.63      C
ATOM 13313 O  PHE D 340     23.404 113.480 90.348 1.00 22.45      O
ATOM 13314 N  HIS D 341     24.350 112.860 92.296 1.00 23.66      N
ATOM 13316 CA HIS D 341     23.235 112.022 92.750 1.00 24.57      C
ATOM 13318 CB HIS D 341     23.594 111.335 94.087 1.00 24.61      C
ATOM 13321 CG HIS D 341     22.528 110.415 94.606 1.00 24.90      C
ATOM 13322 ND1 HIS D 341    22.165 109.253 93.957 1.00 25.23      N
ATOM 13324 CE1 HIS D 341    21.201 108.657 94.638 1.00 25.18      C
ATOM 13326 NE2 HIS D 341    20.927 109.390 95.704 1.00 24.35      N
ATOM 13328 CD2 HIS D 341    21.743 110.494 95.708 1.00 24.37      C
ATOM 13330 C  HIS D 341     21.887 112.777 92.841 1.00 25.22      C
ATOM 13331 O  HIS D 341     20.837 112.182 92.612 1.00 25.40      O
ATOM 13332 N  ARG D 342     21.921 114.076 93.141 1.00 25.94      N
ATOM 13334 CA ARG D 342     20.712 114.917 93.156 1.00 26.51      C
ATOM 13336 CB ARG D 342     21.001 116.260 93.843 1.00 26.53      C
ATOM 13339 CG ARG D 342     20.471 116.387 95.277 1.00 27.35      C
ATOM 13342 CD ARG D 342     21.546 116.453 96.376 1.00 28.04      C
ATOM 13345 NE ARG D 342     21.296 117.526 97.343 1.00 27.92      N
ATOM 13347 CZ ARG D 342     21.949 118.692 97.396 1.00 28.32      C
ATOM 13348 NH1 ARG D 342    22.929 118.984 96.539 1.00 27.50      N
ATOM 13351 NH2 ARG D 342    21.612 119.583 98.328 1.00 28.66      N
ATOM 13354 C  ARG D 342     20.148 115.165 91.737 1.00 26.96      C
ATOM 13355 O  ARG D 342     18.973 115.518 91.584 1.00 26.59      O
ATOM 13356 N  ALA D 343     21.001 114.981 90.718 1.00 27.71      N
ATOM 13358 CA ALA D 343     20.621 115.056 89.297 1.00 28.17      C
ATOM 13360 CB ALA D 343 .   21.841 115.420 88.420 1.00 28.01      C
ATOM 13364 C  ALA D 343     20.000 113.771 88.776 1.00 28.68      C
ATOM 13365 O  ALA D 343     19.811 113.648 87.573 1.00 28.97      O
ATOM 13366 N  GLY D 344     19.696 112.826 89.671 1.00 29.34      N
ATOM 13368 CA GLY D 344     19.109 111.539 89.319 1.00 29.76      C
ATOM 13371 C  GLY D 344     20.107 110.430 88.982 1.00 30.22      C
ATOM 13372 O  GLY D 344     19.692 109.326 88.648 1.00 30.33      O
ATOM 13373 N  LEU D 345     21.409 110.703 89.079 1.00 30.59      N
ATOM 13375 CA LEU D 345     22.436 109.761 88.619 1.00 30.99      C
ATOM 13377 CB LEU D 345     23.785 110.482 88.392 1.00 31.13      C
ATOM 13380 CG LEU D 345     23.869 111.635 87.372 1.00 31.54      C
ATOM 13382 CD1 LEU D 345    25.317 111.914 87.000 1.00 31.62      C
ATOM 13386 CD2 LEU D 345    23.052 111.376 86.110 1.00 32.03      C
ATOM 13390 C  LEU D 345     22.655 108.545 89.541 1.00 31.08      C
ATOM 13391 O  LEU D 345     22.474 108.620 90.768 1.00 31.20      O
ATOM 13392 N  GLN D 346     23.027 107.431 88.903 1.00 31.06      N
ATOM 13394 CA GLN D 346     23.442 106.191 89.556 1.00 31.00      C
ATOM 13396 CB GLN D 346     23.721 105.111 88.503 1.00 31.10      C
ATOM 13399 CG GLN D 346     22.582 104.170 88.205 1.00 31.85      C
ATOM 13402 CD GLN D 346     23.015 102.995 87.321 1.00 32.92      C
ATOM 13403 OE1 GLN D 346    22.733 101.826 87.639 1.00 33.78      O
ATOM 13404 NE2 GLN D 346    23.700 103.301 86.218 1.00 31.83      N
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ATOM 13407 C   GLN D 346   24.729 106.377 90.352 1.00 30.85    C
ATOM 13408 O   GLN D 346   25.688 106.977 89.859 1.00 30.87    O
ATOM 13409 N   VAL D 347   24.749 105.808 91.560 1.00 30.65    N
ATOM 13411 CA  VAL D 347   25.959 105.682 92.394 1.00 30.36    C
ATOM 13413 CB  VAL D 347   25.638 104.859 93.673 1.00 30.19    C
ATOM 13415 CG1 VAL D 347   26.909 104.399 94.373 1.00 29.60    C
ATOM 13419 CG2 VAL D 347   24.768 105.690 94.621 1.00 30.41    C
ATOM 13423 C   VAL D 347   27.108 104.988 91.657 1.00 30.12    C
ATOM 13424 O   VAL D 347   28.276 105.346 91.783 1.00 30.18    O
ATOM 13425 N   GLU D 348   26.721 104.007 90.857 1.00 29.75    N
ATOM 13427 CA  GLU D 348   27.602 103.018 90.263 1.00 29.12    C
ATOM 13429 CB  GLU D 348   26.732 101.823 89.789 1.00 29.32    C
ATOM 13432 CG  GLU D 348   25.344 101.775 90.485 1.00 30.20    C
ATOM 13435 CD  GLU D 348   24.687 100.410 90.574 1.00 32.08    C
ATOM 13436 OE1 GLU D 348   25.304  99.410 90.160 1.00 34.02    O
ATOM 13437 OE2 GLU D 348   23.538 100.334 91.079 1.00 32.31    O
ATOM 13438 C   GLU D 348   28.429 103.693 89.153 1.00 28.19    C
ATOM 13439 O   GLU D 348   29.515 103.227 88.795 1.00 27.93    O
ATOM 13440 N   PHE D 349   27.914 104.822 88.656 1.00 27.37    N
ATOM 13442 CA  PHE D 349   28.647 105.740 87.768 1.00 26.58    C
ATOM 13444 CB  PHE D 349   27.655 106.528 86.883 1.00 26.82    C
ATOM 13447 CG  PHE D 349   28.311 107.529 85.946 1.00 27.76    C
ATOM 13448 CD1 PHE D 349   29.220 107.114 84.989 1.00 27.85    C
ATOM 13450 CE1 PHE D 349   29.801 108.004 84.136 1.00 27.86    C
ATOM 13452 CZ  PHE D 349   29.497 109.347 84.222 1.00 29.09    C
ATOM 13454 CE2 PHE D 349   28.594 109.792 85.162 1.00 29.42    C
ATOM 13456 CD2 PHE D 349   28.000 108.885 86.019 1.00 29.04    C
ATOM 13458 C   PHE D 349   29.508 106.723 88.561 1.00 25.28    C
ATOM 13459 O   PHE D 349   30.659 106.943 88.219 1.00 24.79    O
ATOM 13460 N   ILE D 350   28.932 107.300 89.613 1.00 24.05    N
ATOM 13462 CA  ILE D 350   29.560 108.370 90.381 1.00 23.28    C
ATOM 13464 CB  ILE D 350   28.574 108.917 91.482 1.00 23.37    C
ATOM 13466 CG1 ILE D 350   27.430 109.695 90.831 1.00 22.93    C
ATOM 13469 CD1 ILE D 350   26.212 109.857 91.698 1.00 21.90    C
ATOM 13473 CG2 ILE D 350   29.290 109.847 92.496 1.00 22.95    C
ATOM 13477 C   ILE D 350   30.878 107.961 91.024 1.00 22.81    C
ATOM 13478 O   ILE D 350   31.837 108.721 90.983 1.00 22.60    O
ATOM 13479 N   ASN D 351   30.925 106.780 91.629 1.00 22.37    N
ATOM 13481 CA  ASN D 351   32.086 106.381 92.427 1.00 22.38    C
ATOM 13483 CB  ASN D 351   31.761 105.140 93.290 1.00 22.44    C
ATOM 13486 CG  ASN D 351   30.794 105.452 94.453 1.00 22.56    C
ATOM 13487 OD1 ASN D 351   30.899 106.489 95.104 1.00 23.39    O
ATOM 13488 ND2 ASN D 351   29.861 104.544 94.710 1.00 20.88    N
ATOM 13491 C   ASN D 351   33.393 106.197 91.599 1.00 22.35    C
ATOM 13492 O   ASN D 351   34.446 106.707 91.999 1.00 21.94    O
ATOM 13493 N   PRO D 352   33.343 105.466 90.477 1.00 22.41    N
ATOM 13494 CA  PRO D 352   34.451 105.455 89.507 1.00 22.36    C
ATOM 13496 CB  PRO D 352   33.926 104.530 88.402 1.00 22.66    C
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ATOM 13499 CG  PRO D 352    32.935 103.627 89.100 1.00 22.54    C
ATOM 13502 CD  PRO D 352    32.280 104.516 90.085 1.00 22.68    C
ATOM 13505 C   PRO D 352    34.860 106.836 88.932 1.00 22.23    C
ATOM 13506 O   PRO D 352    36.065 107.048 88.772 1.00 21.99    O
ATOM 13507 N   ILE D 353    33.909 107.733 88.638 1.00 21.92    N
ATOM 13509 CA  ILE D 353    34.230 109.097 88.202 1.00 22.00    C
ATOM 13511 CB  ILE D 353    32.952 110.004 88.087 1.00 22.56    C
ATOM 13513 CG1 ILE D 353    32.008 109.566 86.971 1.00 23.46    C
ATOM 13516 CD1 ILE D 353    32.688 108.789 85.859 1.00 25.94    C
ATOM 13520 CG2 ILE D 353    33.330 111.482 87.823 1.00 23.55    C
ATOM 13524 C   ILE D 353    35.164 109.773 89.170 1.00 21.70    C
ATOM 13525 O   ILE D 353    36.158 110.370 88.769 1.00 21.04    O
ATOM 13526 N   PHE D 354    34.805 109.703 90.447 1.00 21.95    N
ATOM 13528 CA  PHE D 354    35.522 110.409 91.499 1.00 22.21    C
ATOM 13530 CB  PHE D 354    34.597 110.640 92.701 1.00 22.27    C
ATOM 13533 CG  PHE D 354    33.726 111.879 92.571 1.00 23.48    C
ATOM 13534 CD1 PHE D 354    32.730 111.953 91.602 1.00 24.85    C
ATOM 13536 CE1 PHE D 354    31.932 113.101 91.485 1.00 24.80    C
ATOM 13538 CZ  PHE D 354    32.136 114.180 92.333 1.00 24.01    C
ATOM 13540 CE2 PHE D 354    33.125 114.121 93.288 1.00 23.68    C
ATOM 13542 CD2 PHE D 354    33.917 112.980 93.406 1.00 23.84    C
ATOM 13544 C   PHE D 354    36.833 109.703 91.888 1.00 22.27    C
ATOM 13545 O   PHE D 354    37.853 110.367 92.105 1.00 21.82    O
ATOM 13546 N   GLU D 355    36.804 108.368 91.947 1.00 22.53    N
ATOM 13548 CA  GLU D 355    38.011 107.565 92.166 1.00 22.94    C
ATOM 13550 CB  GLU D 355    37.672 106.059 92.216 1.00 23.60    C
ATOM 13553 CG  GLU D 355    38.786 105.055 91.844 1.00 26.19    C
ATOM 13556 CD  GLU D 355    38.343 103.571 91.983 1.00 29.80    C
ATOM 13557 OE1 GLU D 355    38.313 102.821 90.953 1.00 30.45    O
ATOM 13558 OE2 GLU D 355    38.031 103.146 93.128 1.00 28.86    O
ATOM 13559 C   GLU D 355    39.017 107.881 91.069 1.00 22.55    C
ATOM 13560 O   GLU D 355    40.192 108.075 91.341 1.00 22.51    O
ATOM 13561 N   PHE D 356    38.547 107.962 89.831 1.00 22.09    N
ATOM 13563 CA  PHE D 356    39.425 108.252 88.714 1.00 21.85    C
ATOM 13565 CB  PHE D 356    38.644 108.236 87.389 1.00 21.68    C
ATOM 13568 CG  PHE D 356    39.479 108.563 86.161 1.00 20.25    C
ATOM 13569 CD1 PHE D 356    40.379 107.643 85.647 1.00 19.48    C
ATOM 13571 CE1 PHE D 356    41.125 107.925 84.516 1.00 20.32    C
ATOM 13573 CZ  PHE D 356    40.976 109.155 83.857 1.00 20.78    C
ATOM 13575 CE2 PHE D 356    40.078 110.083 84.353 1.00 20.72    C
ATOM 13577 CD2 PHE D 356    39.326 109.775 85.506 1.00 20.37    C
ATOM 13579 C   PHE D 356    40.068 109.613 88.932 1.00 22.21    C
ATOM 13580 O   PHE D 356    41.273 109.776 88.746 1.00 22.62    O
ATOM 13581 N   SER D 357    39.260 110.581 89.338 1.00 22.26    N
ATOM 13583 CA  SER D 357    39.698 111.965 89.441 1.00 22.46    C
ATOM 13585 CB  SER D 357    38.499 112.854 89.725 1.00 22.55    C
ATOM 13588 OG  SER D 357    37.497 112.608 88.748 1.00 23.09    O
ATOM 13590 C   SER D 357    40.719 112.123 90.540 1.00 22.77    C
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ATOM 13591  O   SER D 357   41.752 112.749 90.336 1.00 22.80        O
ATOM 13592  N   ARG D 358   40.406 111.562 91.705 1.00 23.22        N
ATOM 13594·CA   ARG D 358   41.341 111.441 92.822 1.00 23.69        C
ATOM 13596  CB  ARG D 358   40.737 110.539 93.895 1.00 23.84        C
ATOM 13599  CG  ARG D 358   39.950 111.209 94.976 1.00 24.37        C
ATOM 13602  CD  ARG D 358   39.736 110.306 96.194 1.00 26.14        C
ATOM 13605  NE  ARG D 358   39.529 108.888 95.840 1.00 28.42        N
ATOM 13607  CZ  ARG D 358   38.343 108.249 95.780 1.00 29.21        C
ATOM 13608  NH1 ARG D 358   37.197 108.883 96.034 1.00 29.97        N
ATOM 13611  NH2 ARG D 358   38.300 106.958 95.450 1.00 27.86        N
ATOM 13614  C   ARG D 358   42.691 110.830 92.426 1.00 23.99        C
ATOM 13615  O   ARG D 358   43.751 111.291 92.843 1.00 24.03        O
ATOM 13616  N   ALA D 359   42.646 109.761 91.657 1.00 24.70        N
ATOM 13618  CA  ALA D 359   43.859 109.060 91.284 1.00 25.97        C
ATOM 13620  CB  ALA D 359   43.518 107.709 90.658 1.00 26.12        C
ATOM 13624  C   ALA D 359   44.698 109.895 90.320 1.00 26.89        C
ATOM 13625  O   ALA D 359   45.927 109.899 90.386 1.00 27.13        O
ATOM 13626  N   MET D 360   44.015 110.595 89.422 1.00 27.85        N
ATOM 13628  CA  MET D 360   44.656 111.460 88.446 1.00 28.56        C
ATOM 13630  CB  MET D 360   43.597 112.080 87.546 1.00 28.45        C
ATOM 13633  CG  MET D 360   44.056 112.313 86.120 1.00 30.11        C
ATOM 13636  SD  MET D 360   44.377 110.883 85.113 1.00 28.53        S
ATOM 13637  CE  MET D 360   43.314 109.810 85.823 1.00 34.13        C
ATOM 13641  C   MET D 360   45.417 112.569 89.155 1.00 29.08        C
ATOM 13642  O   MET D 360   46.510 112.954 88.745 1.00 29.36        O
ATOM 13643  N   ARG D 361   44.824 113.076 90.227 1.00 29.70        N
ATOM 13645  CA  ARG D 361   45.424 114.136 91.017 1.00 30.30        C
ATOM 13647  CB  ARG D 361   44.445 114.577 92.114 1.00 31.01        C
ATOM 13650  CG  ARG D 361   44.491 116.079 92.461 1.00 33.71        C
ATOM 13653  CD  ARG D 361   44.105 117.057 91.292 1.00 36.07        C
ATOM 13656  NE  ARG D 361   44.559 118.427 91.594 1.00 38.11        N
ATOM 13658  CZ  ARG D 361   44.012 119.551 91.130 1.00 39.33        C
ATOM 13659  NH1 ARG D 361   42.974 119.521 90.303 1.00 40.49        N
ATOM 13662  NH2 ARG D 361   44.517 120.725 91.492 1.00 39.98        N
ATOM 13665  C   ARG D 361   46.770 113.722 91.626 1.00 29.88        C
ATOM 13666  O   ARG D 361   47.661 114.546 91.763 1.00 30.15        O
ATOM 13667  N   ARG D 362   46.909 112.446 91.985 1.00 29.65        N
ATOM 13669  CA  ARG D 362   48.170 111.878 92.511 1.00 29.18        C
ATOM 13671  CB  ARG D 362   47.904 110.507 93.169 1.00 29.35        C
ATOM 13674  CG  ARG D 362   47.317 110.584 94.575 1.00 30.19        C
ATOM 13677  CD  ARG D 362   47.282 109.249 95.323 1.00 31.60        C
ATOM 13680  NE  ARG D 362   45.948 108.648 95.253 1.00 32.65        N
ATOM 13682  CZ  ARG D 362   45.557 107.717 94.377 1.00 33.54        C
ATOM 13683  NH1 ARG D 362   46.392 107.224 93.461 1.00 34.22        N
ATOM 13686  NH2 ARG D 362   44.307 107.271 94.412 1.00 33.57        N
ATOM 13689  C   ARG D 362   49.276 111.729 91.447 1.00 28.41        C
ATOM 13690  O   ARG D 362   50.456 111.699 91.775 1.00 28.03        O
ATOM 13691  N   LEU D 363   48.886 111.593 90.181 1.00 27.94        N
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ATOM 13693 CA  LEU D 363   49.840 111.656 89.066 1.00 27.63       C
ATOM 13695 CB  LEU D 363   49.227 111.128 87.757 1.00 27.65       C
ATOM 13698 CG  LEU D 363   49.419 109.647 87.420 1.00 29.01       C
ATOM 13700 CD1 LEU D 363   48.824 109.324 86.037 1.00 29.75       C
ATOM 13704 CD2 LEU D 363   50.874 109.230 87.468 1.00 29.68       C
ATOM 13708 C   LEU D 363   50.337 113.091 88.854 1.00 26.67       C
ATOM 13709 O   LEU D 363   51.453 113.292 88.377 1.00 26.33       O
ATOM 13710 N   GLY D 364   49.497 114.069 89.200 1.00 25.70       N
ATOM 13712 CA  GLY D 364   49.838 115.471 89.097 1.00 25.00       C
ATOM 13715 C   GLY D 364   50.272 115.827 87.698 1.00 24.46       C
ATOM 13716 O   GLY D 364   51.367 116.319 87.512 1.00 24.19       O
ATOM 13717 N   LEU D 365   49.429 115.554 86.707 1.00 23.82       N
ATOM 13719 CA  LEU D 365   49.751 115.950 85.340 1.00 23.63       C
ATOM 13721 CB  LEU D 365   48.755 115.348 84.333 1.00 23.97       C
ATOM 13724 CG  LEU D 365   48.642 113.823 84.122 1.00 25.37       C
ATOM 13726 CD1 LEU D 365   48.105 113.520 82.731 1.00 26.39       C
ATOM 13730 CD2 LEU D 365   49.932 113.110 84.331 1.00 25.72       C
ATOM 13734 C   LEU D 365   49.780 117.485 85.176 1.00 22.74       C
ATOM 13735 O   LEU D 365   49.017 118.206 85.825 1.00 22.40       O
ATOM 13736 N   ASP D 366   50.666 117.964 84.303 1.00 21.78       N
ATOM 13738 CA  ASP D 366   50.739 119.384 83.959 1.00 21.15       C
ATOM 13740 CB  ASP D 366   52.192 119.895 83.946 1.00 20.82       C
ATOM 13743 CG  ASP D 366   53.069 119.161 82.977 1.00 19.90       C
ATOM 13744 OD1 ASP D 366   52.536 118.498 82.080 1.00 19.99       O
ATOM 13745 OD2 ASP D 366   54.311 119.183 83.027 1.00 19.11       O
ATOM 13746 C   ASP D 366   50.023 119.609 82.631 1.00 20.87       C
ATOM 13747 O   ASP D 366   49.387 118.696 82.105 1.00 20.68       O
ATOM 13748 N   ASP D 367   50.093 120.826 82.104 1.00 20.37       N
ATOM 13750 CA  ASP D 367   49.335 121.161 80.906 1.00 20.07       C
ATOM 13752 CB  ASP D 367   49.370 122.668 80.651 1.00 20.06       C
ATOM 13755 CG  ASP D 367   48.587 123.480 81.707 1.00 20.54       C
ATOM 13756 OD1 ASP D 367   47.757 122.922 82.449 1.00 19.80       O
ATOM 13757 OD2 ASP D 367   48.735 124.711 81.855 1.00 22.21       O
ATOM 13758 C   ASP D 367   49.815 120.367 79.677 1.00 19.79       C
ATOM 13759 O   ASP D 367   49.009 119.853 78.898 1.00 20.20       O
ATOM 13760 N   ALA D 368   51.119 120.243 79.521 1.00 19.10       N
ATOM 13762 CA  ALA D 368   51.675 119.515 78.404 1.00 18.97       C
ATOM 13764 CB  ALA D 368   53.174 119.610 78.454 1.00 19.22       C
ATOM 13768 C   ALA D 368   51.244 118.041 78.420 1.00 19.05       C
ATOM 13769 O   ALA D 368   50.894 117.458 77.382 1.00 19.42       O
ATOM 13770 N   GLU D 369   51.263 117.453 79.613 1.00 18.57       N
ATOM 13772 CA  GLU D 369   51.017 116.038 79.791 1.00 17.67       C
ATOM 13774 CB  GLU D 369   51.444 115.590 81.187 1.00 17.57       C
ATOM 13777 CG  GLU D 369   52.954 115.386 81.330 1.00 16.91       C
ATOM 13780 CD  GLU D 369   53.435 115.301 82.779 1.00 15.04       C
ATOM 13781 OE1 GLU D 369   54.568 114.842 83.036 1.00 13.47       O
ATOM 13782 OE2 GLU D 369   52.686 115.681 83.685 1.00 15.20       O
ATOM 13783 C   GLU D 369   49.558 115.761 79.556 1.00 17.63       C
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ATOM  13784  O    GLU D 369    49.219 114.772 78.920 1.00 18.08       O
ATOM  13785  N    TYR D 370    48.676 116.628 80.025 1.00 17.66       N
ATOM  13787  CA   TYR D 370    47.261 116.383 79.794 1.00 18.30       C
ATOM  13789  CB   TYR D 370    46.381 117.376 80.517 1.00 18.67       C
ATOM  13792  CG   TYR D 370    45.808 116.849 81.801 1.00 21.05       C
ATOM  13793  CD1  TYR D 370    46.142 117.446 83.028 1.00 23.25       C
ATOM  13795  CE1  TYR D 370    45.627 116.986 84.221 1.00 23.37       C
ATOM  13797  CZ   TYR D 370    44.768 115.914 84.229 1.00 23.91       C
ATOM  13798  OH   TYR D 370    44.274 115.482 85.440 1.00 23.59       O
ATOM  13800  CE2  TYR D 370    44.409 115.300 83.028 1.00 24.96       C
ATOM  13802  CD2  TYR D 370    44.934 115.783 81.808 1.00 22.06       C
ATOM  13804  C    TYR D 370    46.953 116.460 78.319 1.00 18.19       C
ATOM  13805  O    TYR D 370    46.259 115.603 77.791 1.00 17.82       O
ATOM  13806  N    ALA D 371    47.491 117.493 77.668 1.00 18.69       N
ATOM  13808  CA   ALA D 371    47.179 117.801 76.272 1.00 18.52       C
ATOM  13810  CB   ALA D 371    47.795 119.140 75.852 1.00 18.43       C
ATOM  13814  C    ALA D 371    47.661 116.674 75.390 1.00 18.35       C
ATOM  13815  O    ALA D 371    46.945 116.232 74.487 1.00 18.18       O
ATOM  13816  N    LEU D 372    48.847 116.170 75.693 1.00 18.25       N
ATOM  13818  CA   LEU D 372    49.373 115.028 74.964 1.00 18.98       C
ATOM  13820  CB   LEU D 372    50.807 114.739 75.415 1.00 18.86       C
ATOM  13823  CG   LEU D 372    51.815 115.736 74.853 1.00 18.92       C
ATOM  13825  CD1  LEU D 372    53.181 115.643 75.548 1.00 18.38       C
ATOM  13829  CD2  LEU D 372    51.934 115.533 73.353 1.00 19.42       C
ATOM  13833  C    LEU D 372    48.503 113.760 75.099 1.00 19.72       C
ATOM  13834  O    LEU D 372    48.331 113.008 74.154 1.00 19.43       O
ATOM  13835  N    LEU D 373    47.971 113.530 76.292 1.00 20.97       N
ATOM  13837  CA   LEU D 373    47.180 112.329 76.574 1.00 21.51       C
ATOM  13839  CB   LEU D 373    46.819 112.225 78.068 1.00 22.02       C
ATOM  13842  CG   LEU D 373    47.579 111.219 78.927 1.00 23.19       C
ATOM  13844  CD1  LEU D 373    46.906 111.138 80.293 1.00 24.13       C
ATOM  13848  CD2  LEU D 373    47.641 109.871 78.243 1.00 23.08       C
ATOM  13852  C    LEU D 373    45.909 112.368 75.786 1.00 21.12       C
ATOM  13853  O    LEU D 373    45.394 111.332 75.360 1.00 20.97       O
ATOM  13854  N    ILE D 374    45.382 113.560 75.605 1.00 20.62       N
ATOM  13856  CA   ILE D 374    44.163 113.654 74.868 1.00 21.18       C
ATOM  13858  CB   ILE D 374    43.565 115.011 74.986 1.00 21.45       C
ATOM  13860  CG1  ILE D 374    43.228 115.327 76.456 1.00 22.09       C
ATOM  13863  CD1  ILE D 374    43.129 116.846 76.721 1.00 20.83       C
ATOM  13867  CG2  ILE D 374    42.339 115.092 74.048 1.00 21.96       C
ATOM  13871  C    ILE D 374    44.441 113.354 73.397 1.00 21.37       C
ATOM  13872  O    ILE D 374    43.705 112.601 72.765 1.00 21.71       O
ATOM  13873  N    ALA D 375    45.496 113.944 72.845 1.00 20.92       N
ATOM  13875  CA   ALA D 375    45.829 113.693 71.456 1.00 20.37       C
ATOM  13877  CB   ALA D 375    47.084 114.443 71.089 1.00 20.56       C
ATOM  13881  C    ALA D 375    46.012 112.193 71.261 1.00 20.11       C
ATOM  13882  O    ALA D 375    45.441 111.611 70.362 1.00 19.98       O
ATOM  13883  N    ILE D 376    46.787 111.582 72.152 1.00 20.02       N
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| ATOM | 13885 | CA | ILE | D | 376 | 47.047 | 110.161 | 72.141 | 1.00 | 19.93 | C |
|------|-------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 13887 | CB | ILE | D | 376 | 47.960 | 109.772 | 73.318 | 1.00 | 19.91 | C |
| ATOM | 13889 | CG1 | ILE | D | 376 | 49.370 | 110.321 | 73.087 | 1.00 | 19.82 | C |
| ATOM | 13892 | CD1 | ILE | D | 376 | 50.422 | 109.953 | 74.173 | 1.00 | 20.60 | C |
| ATOM | 13896 | CG2 | ILE | D | 376 | 48.013 | 108.222 | 73.502 | 1.00 | 20.45 | C |
| ATOM | 13900 | C | ILE | D | 376 | 45.743 | 109.383 | 72.172 | 1.00 | 20.24 | C |
| ATOM | 13901 | O | ILE | D | 376 | 45.592 | 108.383 | 71.460 | 1.00 | 20.69 | O |
| ATOM | 13902 | N | ASN | D | 377 | 44.806 | 109.843 | 72.988 | 1.00 | 20.20 | N |
| ATOM | 13904 | CA | ASN | D | 377 | 43.544 | 109.144 | 73.193 | 1.00 | 20.29 | C |
| ATOM | 13906 | CB | ASN | D | 377 | 42.818 | 109.737 | 74.438 | 1.00 | 20.78 | C |
| ATOM | 13909 | CG | ASN | D | 377 | 41.464 | 109.059 | 74.742 | 1.00 | 20.97 | C |
| ATOM | 13910 | OD1 | ASN | D | 377 | 40.473 | 109.329 | 74.066 | 1.00 | 23.08 | O |
| ATOM | 13911 | ND2 | ASN | D | 377 | 41.420 | 108.218 | 75.769 | 1.00 | 16.97 | N |
| ATOM | 13914 | C | ASN | D | 377 | 42.690 | 109.230 | 71.919 | 1.00 | 19.95 | C |
| ATOM | 13915 | O | ASN | D | 377 | 41.993 | 108.278 | 71.560 | 1.00 | 20.27 | O |
| ATOM | 13916 | N | ILE | D | 378 | 42.738 | 110.377 | 71.250 | 1.00 | 19.26 | N |
| ATOM | 13918 | CA | ILE | D | 378 | 41.968 | 110.599 | 70.030 | 1.00 | 18.75 | C |
| ATOM | 13920 | CB | ILE | D | 378 | 42.153 | 112.060 | 69.508 | 1.00 | 18.77 | C |
| ATOM | 13922 | CG1 | ILE | D | 378 | 41.342 | 113.031 | 70.375 | 1.00 | 19.09 | C |
| ATOM | 13925 | CD1 | ILE | D | 378 | 41.781 | 114.472 | 70.341 | 1.00 | 18.79 | C |
| ATOM | 13929 | CG2 | ILE | D | 378 | 41.724 | 112.187 | 68.044 | 1.00 | 18.91 | C |
| ATOM | 13933 | C | ILE | D | 378 | 42.382 | 109.578 | 68.981 | 1.00 | 18.32 | C |
| ATOM | 13934 | O | ILE | D | 378 | 41.519 | 108.926 | 68.376 | 1.00 | 16.91 | O |
| ATOM | 13935 | N | PHE | D | 379 | 43.701 | 109.422 | 68.823 | 1.00 | 18.34 | N |
| ATOM | 13937 | CA | PHE | D | 379 | 44.297 | 108.552 | 67.805 | 1.00 | 18.78 | C |
| ATOM | 13939 | CB | PHE | D | 379 | 45.643 | 109.133 | 67.324 | 1.00 | 18.61 | C |
| ATOM | 13942 | CG | PHE | D | 379 | 45.493 | 110.415 | 66.539 | 1.00 | 17.77 | C |
| ATOM | 13943 | CD1 | PHE | D | 379 | 46.182 | 111.562 | 66.910 | 1.00 | 15.28 | C |
| ATOM | 13945 | CE1 | PHE | D | 379 | 46.000 | 112.731 | 66.255 | 1.00 | 14.16 | C |
| ATOM | 13947 | CZ | PHE | D | 379 | 45.157 | 112.796 | 65.182 | 1.00 | 15.49 | C |
| ATOM | 13949 | CE2 | PHE | D | 379 | 44.465 | 111.679 | 64.785 | 1.00 | 16.73 | C |
| ATOM | 13951 | CD2 | PHE | D | 379 | 44.623 | 110.486 | 65.473 | 1.00 | 16.28 | C |
| ATOM | 13953 | C | PHE | D | 379 | 44.444 | 107.085 | 68.237 | 1.00 | 19.48 | C |
| ATOM | 13954 | O | PHE | D | 379 | 45.507 | 106.467 | 68.067 | 1.00 | 18.89 | O |
| ATOM | 13955 | N | SER | D | 380 | 43.355 | 106.536 | 68.773 | 1.00 | 20.73 | N |
| ATOM | 13957 | CA | SER | D | 380 | 43.291 | 105.140 | 69.175 | 1.00 | 22.12 | C |
| ATOM | 13959 | CB | SER | D | 380 | 42.420 | 104.992 | 70.402 | 1.00 | 22.33 | C |
| ATOM | 13962 | OG | SER | D | 380 | 42.986 | 105.676 | 71.489 | 1.00 | 23.06 | O |
| ATOM | 13964 | C | SER | D | 380 | 42.691 | 104.347 | 68.029 | 1.00 | 23.01 | C |
| ATOM | 13965 | O | SER | D | 380 | 41.533 | 104.555 | 67.626 | 1.00 | 22.89 | O |
| ATOM | 13966 | N | ALA | D | 381 | 43.486 | 103.446 | 67.487 | 1.00 | 23.95 | N |
| ATOM | 13968 | CA | ALA | D | 381 | 43.197 | 102.911 | 66.170 | 1.00 | 24.86 | C |
| ATOM | 13970 | CB | ALA | D | 381 | 44.492 | 102.384 | 65.538 | 1.00 | 24.88 | C |
| ATOM | 13974 | C | ALA | D | 381 | 42.115 | 101.817 | 66.268 | 1.00 | 25.60 | C |
| ATOM | 13975 | O | ALA | D | 381 | 41.365 | 101.554 | 65.296 | 1.00 | 26.24 | O |
| ATOM | 13976 | N | ASP | D | 382 | 42.017 | 101.233 | 67.467 | 1.00 | 25.73 | N |
| ATOM | 13978 | CA | ASP | D | 382 | 41.087 | 100.138 | 67.785 | 1.00 | 25.68 | C |
| ATOM | 13980 | CB | ASP | D | 382 | 41.688 | 99.351 | 68.929 | 1.00 | 25.77 | C |

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ATOM 13983 CG  ASP D 382    41.538 100.071 70.217 1.00 26.58        C
ATOM 13984 OD1 ASP D 382    41.974 101.227 70.325 1.00 24.92        O
ATOM 13985 OD2 ASP D 382    40.909 99.570 71.157 1.00 33.53         O
ATOM 13986 C   ASP D 382    39.670 100.569 68.217 1.00 25.05        C
ATOM 13987 O   ASP D 382    38.994 99.837 68.939 1.00 25.29         O
ATOM 13988 N   ARG D 383    39.223 101.749 67.802 1.00 24.36        N
ATOM 13990 CA  ARG D 383    37.887 102.194 68.138 1.00 23.67        C
ATOM 13992 CB  ARG D 383    37.723 103.687 67.917 1.00 23.35        C
ATOM 13995 CG  ARG D 383    38.606 104.525 68.764 1.00 22.04        C
ATOM 13998 CD  ARG D 383    38.377 104.330 70.242 1.00 21.22        C
ATOM 14001 NE  ARG D 383    38.854 105.473 71.003 1.00 21.38        N
ATOM 14003 CZ  ARG D 383    38.749 105.602 72.320 1.00 20.71        C
ATOM 14004 NH1 ARG D 383    38.177 104.654 73.044 1.00 18.63        N
ATOM 14007 NH2 ARG D 383    39.223 106.704 72.902 1.00 21.51        N
ATOM 14010 C   ARG D 383    36.953 101.493 67.211 1.00 23.94        C
ATOM 14011 O   ARG D 383    37.333 101.137 66.107 1.00 23.91        O
ATOM 14012 N   PRO D 384    35.707 101.357 67.614 1.00 24.37        N
ATOM 14013 CA  PRO D 384    34.717 100.764 66.727 1.00 24.50        C
ATOM 14015 CB  PRO D 384    33.404 100.906 67.508 1.00 24.50        C
ATOM 14018 CG  PRO D 384    33.796 101.100 68.909 1.00 24.66        C
ATOM 14021 CD  PRO D 384    35.114 101.802 68.887 1.00 24.73        C
ATOM 14024 C   PRO D 384    34.655 101.576 65.443 1.00 24.46        C
ATOM 14025 O   PRO D 384    34.892 102.789 65.477 1.00 24.80        O
ATOM 14026 N   ASN D 385    34.364 100.895 64.336 1.00 24.41        N
ATOM 14028 CA  ASN D 385    33.988 101.519 63.048 1.00 24.06        C
ATOM 14030 CB  ASN D 385    32.684 102.335 63.209 1.00 24.13        C
ATOM 14033 CG  ASN D 385    31.483 101.442 63.519 1.00 24.57        C
ATOM 14034 OD1 ASN D 385    31.241 100.474 62.811 1.00 25.47        O
ATOM 14035 ND2 ASN D 385    30.748 101.753 64.583 1.00 24.61        N
ATOM 14038 C   ASN D 385    35.081 102.312 62.327 1.00 23.13        C
ATOM 14039 O   ASN D 385    34.794 103.058 61.413 1.00 23.40        O
ATOM 14040 N   VAL D 386    36.333 102.115 62.711 1.00 22.23        N
ATOM 14042 CA  VAL D 386    37.432 102.819 62.085 1.00 21.64        C
ATOM 14044 CB  VAL D 386    38.597 102.868 63.009 1.00 21.89        C
ATOM 14046 CG1 VAL D 386    39.801 103.489 62.308 1.00 23.24        C
ATOM 14050 CG2 VAL D 386    38.236 103.653 64.260 1.00 22.08        C
ATOM 14054 C   VAL D 386    37.885 102.117 60.822 1.00 21.29        C
ATOM 14055 O   VAL D 386    38.262 100.962 60.871 1.00 20.91        O
ATOM 14056 N   GLN D 387    37.870 102.840 59.706 1.00 21.17        N
ATOM 14058 CA  GLN D 387    38.274 102.337 58.382 1.00 21.11        C
ATOM 14060 CB  GLN D 387    37.755 103.298 57.316 1.00 21.60        C
ATOM 14063 CG  GLN D 387    36.228 103.474 57.271 1.00 23.84        C
ATOM 14066 CD  GLN D 387    35.442 102.152 57.315 1.00 26.84        C
ATOM 14067 OE1 GLN D 387    35.231 101.587 58.402 1.00 29.70        O
ATOM 14068 NE2 GLN D 387    34.983 101.681 56.151 1.00 26.87        N
ATOM 14071 C   GLN D 387    39.790 102.150 58.138 1.00 20.46        C
ATOM 14072 O   GLN D 387    40.206 101.134 57.551 1.00 20.17        O
ATOM 14073 N   GLU D 388    40.598 103.122 58.578 1.00 19.57        N
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| ATOM | 14075 | CA | GLU | D | 388 | 42.057 | 103.106 | 58.374 | 1.00 | 19.19 | C |
|------|-------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 14077 | CB | GLU | D | 388 | 42.469 | 104.335 | 57.573 | 1.00 | 19.45 | C |
| ATOM | 14080 | CG | GLU | D | 388 | 41.610 | 104.524 | 56.323 | 1.00 | 21.28 | C |
| ATOM | 14083 | CD | GLU | D | 388 | 42.299 | 105.317 | 55.207 | 1.00 | 22.49 | C |
| ATOM | 14084 | OE1 | GLU | D | 388 | 42.265 | 106.564 | 55.252 | 1.00 | 22.05 | O |
| ATOM | 14085 | OE2 | GLU | D | 388 | 42.874 | 104.695 | 54.281 | 1.00 | 23.94 | O |
| ATOM | 14086 | C | GLU | D | 388 | 42.840 | 103.030 | 59.684 | 1.00 | 18.12 | C |
| ATOM | 14087 | O | GLU | D | 388 | 43.472 | 103.984 | 60.101 | 1.00 | 18.05 | O |
| ATOM | 14088 | N | PRO | D | 389 | 42.800 | 101.896 | 60.357 | 1.00 | 17.29 | N |
| ATOM | 14089 | CA | PRO | D | 389 | 43.466 | 101.816 | 61.649 | 1.00 | 16.81 | C |
| ATOM | 14091 | CB | PRO | D | 389 | 43.156 | 100.416 | 62.141 | 1.00 | 17.09 | C |
| ATOM | 14094 | CG | PRO | D | 389 | 42.733 | 99.631 | 60.902 | 1.00 | 17.43 | C |
| ATOM | 14097 | CD | PRO | D | 389 | 42.123 | 100.640 | 59.984 | 1.00 | 17.25 | C |
| ATOM | 14100 | C | PRO | D | 389 | 44.924 | 102.000 | 61.470 | 1.00 | 16.76 | C |
| ATOM | 14101 | O | PRO | D | 389 | 45.491 | 102.671 | 62.276 | 1.00 | 17.36 | O |
| ATOM | 14102 | N | GLY | D | 390 | 45.517 | 101.430 | 60.435 | 1.00 | 16.78 | N |
| ATOM | 14104 | CA | GLY | D | 390 | 46.900 | 101.702 | 60.098 | 1.00 | 16.85 | C |
| ATOM | 14107 | C | GLY | D | 390 | 47.293 | 103.169 | 60.158 | 1.00 | 17.28 | C |
| ATOM | 14108 | O | GLY | D | 390 | 48.261 | 103.524 | 60.809 | 1.00 | 17.15 | O |
| ATOM | 14109 | N | ARG | D | 391 | 46.527 | 104.017 | 59.489 | 1.00 | 18.14 | N |
| ATOM | 14111 | CA | ARG | D | 391 | 46.796 | 105.440 | 59.439 | 1.00 | 19.06 | C |
| ATOM | 14113 | CB | ARG | D | 391 | 45.861 | 106.150 | 58.473 | 1.00 | 19.79 | C |
| ATOM | 14116 | CG | ARG | D | 391 | 46.235 | 105.856 | 57.027 | 1.00 | 24.81 | C |
| ATOM | 14119 | CD | ARG | D | 391 | 45.343 | 106.479 | 55.937 | 1.00 | 31.08 | C |
| ATOM | 14122 | NE | ARG | D | 391 | 44.909 | 107.848 | 56.239 | 1.00 | 35.63 | N |
| ATOM | 14124 | CZ | ARG | D | 391 | 45.682 | 108.922 | 56.164 | 1.00 | 39.19 | C |
| ATOM | 14125 | NH1 | ARG | D | 391 | 46.950 | 108.832 | 55.783 | 1.00 | 41.56 | N |
| ATOM | 14128 | NH2 | ARG | D | 391 | 45.182 | 110.100 | 56.481 | 1.00 | 39.96 | N |
| ATOM | 14131 | C | ARG | D | 391 | 46.624 | 106.037 | 60.774 | 1.00 | 18.88 | C |
| ATOM | 14132 | O | ARG | D | 391 | 47.399 | 106.881 | 61.144 | 1.00 | 18.53 | O |
| ATOM | 14133 | N | VAL | D | 392 | 45.605 | 105.609 | 61.511 | 1.00 | 19.28 | N |
| ATOM | 14135 | CA | VAL | D | 392 | 45.350 | 106.198 | 62.827 | 1.00 | 19.65 | C |
| ATOM | 14137 | CB | VAL | D | 392 | 43.978 | 105.775 | 63.400 | 1.00 | 19.47 | C |
| ATOM | 14139 | CG1 | VAL | D | 392 | 43.740 | 106.387 | 64.752 | 1.00 | 18.81 | C |
| ATOM | 14143 | CG2 | VAL | D | 392 | 42.846 | 106.211 | 62.462 | 1.00 | 19.77 | C |
| ATOM | 14147 | C | VAL | D | 392 | 46.523 | 105.888 | 63.790 | 1.00 | 20.35 | C |
| ATOM | 14148 | O | VAL | D | 392 | 47.021 | 106.782 | 64.482 | 1.00 | 20.30 | O |
| ATOM | 14149 | N | GLU | D | 393 | 46.988 | 104.639 | 63.776 | 1.00 | 21.00 | N |
| ATOM | 14151 | CA | GLU | D | 393 | 48.068 | 104.174 | 64.638 | 1.00 | 21.57 | C |
| ATOM | 14153 | CB | GLU | D | 393 | 48.298 | 102.681 | 64.426 | 1.00 | 22.36 | C |
| ATOM | 14156 | CG | GLU | D | 393 | 49.419 | 102.065 | 65.247 | 1.00 | 25.56 | C |
| ATOM | 14159 | CD | GLU | D | 393 | 49.519 | 100.549 | 65.063 | 1.00 | 29.06 | C |
| ATOM | 14160 | OE1 | GLU | D | 393 | 49.371 | 99.839 | 66.065 | 1.00 | 31.45 | O |
| ATOM | 14161 | OE2 | GLU | D | 393 | 49.750 | 100.055 | 63.927 | 1.00 | 32.11 | O |
| ATOM | 14162 | C | GLU | D | 393 | 49.333 | 104.933 | 64.350 | 1.00 | 21.24 | C |
| ATOM | 14163 | O | GLU | D | 393 | 50.125 | 105.144 | 65.266 | 1.00 | 20.96 | O |
| ATOM | 14164 | N | ALA | D | 394 | 49.507 | 105.371 | 63.089 | 1.00 | 21.14 | N |
| ATOM | 14166 | CA | ALA | D | 394 | 50.725 | 106.095 | 62.661 | 1.00 | 20.32 | C |

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ATOM  14168  CB  ALA D 394      50.885 106.078 61.201  1.00 19.69          C
ATOM  14172  C   ALA D 394      50.694 107.510 63.153  1.00 20.38          C
ATOM  14173  O   ALA D 394      51.729 108.057 63.510  1.00 20.59          O
ATOM  14174  N   LEU D 395      49.505 108.098 63.196  1.00 20.47          N
ATOM  14176  CA  LEU D 395      49.336 109.420 63.790  1.00 20.77          C
ATOM  14178  CB  LEU D 395      47.928 109.938 63.560  1.00 20.81          C
ATOM  14181  CG  LEU D 395      47.649 110.100 62.087  1.00 22.26          C
ATOM  14183  CD1 LEU D 395      46.175 110.293 61.869  1.00 23.63          C
ATOM  14187  CD2 LEU D 395      48.419 111.258 61.546  1.00 24.74          C
ATOM  14191  C   LEU D 395      49.597 109.397 65.302  1.00 20.59          C
ATOM  14192  O   LEU D 395      50.116 110.375 65.858  1.00 20.26          O
ATOM  14193  N   GLN D 396      49.251 108.293 65.960  1.00 19.73          N
ATOM  14195  CA  GLN D 396      49.356 108.260 67.403  1.00 20.05          C
ATOM  14197  CB  GLN D 396      48.667 107.012 68.017  1.00 20.37          C
ATOM  14200  CG  GLN D 396      48.454 107.124 69.537  1.00 20.06          C
ATOM  14203  CD  GLN D 396      47.979 105.861 70.193  1.00 20.29          C
ATOM  14204  OE1 GLN D 396      46.858 105.815 70.696  1.00 20.80          O
ATOM  14205  NE2 GLN D 396      48.835 104.857 70.247  1.00 19.12          N
ATOM  14208  C   GLN D 396      50.806 108.305 67.826  1.00 19.83          C
ATOM  14209  O   GLN D 396      51.114 108.806 68.894  1.00 19.67          O
ATOM  14210  N   GLN D 397      51.685 107.784 66.981  1.00 19.67          N
ATOM  14212  CA  GLN D 397      53.069 107.597 67.358  1.00 19.66          C
ATOM  14214  CB  GLN D 397      53.829 106.839 66.275  1.00 19.92          C
ATOM  14217  CG  GLN D 397      55.225 106.447 66.705  1.00 22.13          C
ATOM  14220  CD  GLN D 397      56.027 105.832 65.573  1.00 24.57          C
ATOM  14221  OE1 GLN D 397      55.676 104.737 65.095  1.00 27.99          O
ATOM  14222  NE2 GLN D 397      57.090 106.521 65.130  1.00 22.32          N
ATOM  14225  C   GLN D 397      53.790 108.884 67.776  1.00 18.93          C
ATOM  14226  O   GLN D 397      54.280 108.948 68.882  1.00 18.95          O
ATOM  14227  N   PRO D 398      53.881 109.911 66.940  1.00 18.52          N
ATOM  14228  CA  PRO D 398      54.614 111.125 67.343  1.00 18.04          C
ATOM  14230  CB  PRO D 398      54.289 112.146 66.236  1.00 17.79          C
ATOM  14233  CG  PRO D 398      53.418 111.502 65.290  1.00 18.23          C
ATOM  14236  CD  PRO D 398      53.354 110.017 65.574  1.00 18.57          C
ATOM  14239  C   PRO D 398      54.204 111.678 68.711  1.00 17.72          C
ATOM  14240  O   PRO D 398      55.055 112.182 69.418  1.00 17.84          O
ATOM  14241  N   TYR D 399      52.927 111.601 69.065  1.00 17.81          N
ATOM  14243  CA  TYR D 399      52.430 112.085 70.360  1.00 17.76          C
ATOM  14245  CB  TYR D 399      50.904 112.210 70.347  1.00 17.88          C
ATOM  14248  CG  TYR D 399      50.423 113.203 69.330  1.00 18.22          C
ATOM  14249  CD1 TYR D 399      49.900 112.788 68.120  1.00 18.17          C
ATOM  14251  CE1 TYR D 399      49.476 113.688 67.186  1.00 17.27          C
ATOM  14253  CZ  TYR D 399      49.572 115.031 67.443  1.00 18.04          C
ATOM  14254  OH  TYR D 399      49.155 115.953 66.493  1.00 17.86          O
ATOM  14256  CE2 TYR D 399      50.086 115.469 68.641  1.00 17.94          C
ATOM  14258  CD2 TYR D 399      50.516 114.560 69.566  1.00 18.61          C
ATOM  14260  C   TYR D 399      52.870 111.231 71.536  1.00 17.45          C
ATOM  14261  O   TYR D 399      53.166 111.781 72.563  1.00 17.11          O
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| ATOM | 14262 | N   | VAL D 400 | 52.889 109.903 71.383 1.00 17.74 | N |
|------|-------|-----|-----------|----------------------------------|---|
| ATOM | 14264 | CA  | VAL D 400 | 53.475 108.999 72.372 1.00 18.33 | C |
| ATOM | 14266 | CB  | VAL D 400 | 53.382 107.504 71.998 1.00 18.16 | C |
| ATOM | 14268 | CG1 | VAL D 400 | 54.016 106.663 73.066 1.00 18.08 | C |
| ATOM | 14272 | CG2 | VAL D 400 | 51.950 107.048 71.791 1.00 18.79 | C |
| ATOM | 14276 | C   | VAL D 400 | 54.954 109.321 72.540 1.00 19.34 | C |
| ATOM | 14277 | O   | VAL D 400 | 55.375 109.541 73.667 1.00 20.53 | O |
| ATOM | 14278 | N   | GLU D 401 | 55.748 109.327 71.456 1.00 19.54 | N |
| ATOM | 14280 | CA  | GLU D 401 | 57.165 109.730 71.513 1.00 20.05 | C |
| ATOM | 14282 | CB  | GLU D 401 | 57.768 109.846 70.103 1.00 20.71 | C |
| ATOM | 14285 | CG  | GLU D 401 | 58.174 108.538 69.449 1.00 23.83 | C |
| ATOM | 14288 | CD  | GLU D 401 | 58.507 108.676 67.962 1.00 27.86 | C |
| ATOM | 14289 | OE1 | GLU D 401 | 58.158 107.761 67.168 1.00 29.33 | O |
| ATOM | 14290 | OE2 | GLU D 401 | 59.124 109.693 67.572 1.00 30.78 | O |
| ATOM | 14291 | C   | GLU D 401 | 57.386 111.067 72.235 1.00 19.70 | C |
| ATOM | 14292 | O   | GLU D 401 | 58.376 111.258 72.944 1.00 19.28 | O |
| ATOM | 14293 | N   | ALA D 402 | 56.466 111.996 72.026 1.00 19.60 | N |
| ATOM | 14295 | CA  | ALA D 402 | 56.605 113.336 72.554 1.00 19.82 | C |
| ATOM | 14297 | CB  | ALA D 402 | 55.639 114.281 71.874 1.00 19.93 | C |
| ATOM | 14301 | C   | ALA D 402 | 56.366 113.321 74.046 1.00 19.90 | C |
| ATOM | 14302 | O   | ALA D 402 | 57.041 114.027 74.790 1.00 19.68 | O |
| ATOM | 14303 | N   | LEU D 403 | 55.397 112.516 74.486 1.00 20.33 | N |
| ATOM | 14305 | CA  | LEU D 403 | 55.117 112.341 75.932 1.00 20.21 | C |
| ATOM | 14307 | CB  | LEU D 403 | 53.797 111.622 76.156 1.00 19.89 | C |
| ATOM | 14310 | CG  | LEU D 403 | 53.272 111.494 77.583 1.00 19.78 | C |
| ATOM | 14312 | CD1 | LEU D 403 | 53.147 112.824 78.312 1.00 19.37 | C |
| ATOM | 14316 | CD2 | LEU D 403 | 51.928 110.778 77.535 1.00 20.17 | C |
| ATOM | 14320 | C   | LEU D 403 | 56.250 111.598 76.628 1.00 20.40 | C |
| ATOM | 14321 | O   | LEU D 403 | 56.647 111.944 77.744 1.00 19.78 | O |
| ATOM | 14322 | N   | LEU D 404 | 56.787 110.599 75.940 1.00 20.87 | N |
| ATOM | 14324 | CA  | LEU D 404 | 57.922 109.874 76.446 1.00 21.50 | C |
| ATOM | 14326 | CB  | LEU D 404 | 58.307 108.735 75.505 1.00 22.00 | C |
| ATOM | 14329 | CG  | LEU D 404 | 59.590 107.976 75.858 1.00 23.85 | C |
| ATOM | 14331 | CD1 | LEU D 404 | 59.647 107.648 77.336 1.00 24.72 | C |
| ATOM | 14335 | CD2 | LEU D 404 | 59.686 106.722 75.012 1.00 25.57 | C |
| ATOM | 14339 | C   | LEU D 404 | 59.065 110.849 76.629 1.00 21.29 | C |
| ATOM | 14340 | O   | LEU D 404 | 59.571 110.981 77.735 1.00 21.48 | O |
| ATOM | 14341 | N   | SER D 405 | 59.467 111.540 75.562 1.00 21.06 | N |
| ATOM | 14343 | CA  | SER D 405 | 60.562 112.515 75.675 1.00 20.85 | C |
| ATOM | 14345 | CB  | SER D 405 | 60.822 113.286 74.361 1.00 20.96 | C |
| ATOM | 14348 | OG  | SER D 405 | 60.975 112.427 73.240 1.00 21.81 | O |
| ATOM | 14350 | C   | SER D 405 | 60.244 113.517 76.784 1.00 20.13 | C |
| ATOM | 14351 | O   | SER D 405 | 61.091 113.797 77.621 1.00 19.94 | O |
| ATOM | 14352 | N   | TYR D 406 | 59.011 114.024 76.798 1.00 19.43 | N |
| ATOM | 14354 | CA  | TYR D 406 | 58.646 115.094 77.702 1.00 18.84 | C |
| ATOM | 14356 | CB  | TYR D 406 | 57.238 115.627 77.432 1.00 18.39 | C |
| ATOM | 14359 | CG  | TYR D 406 | 56.862 116.741 78.386 1.00 17.05 | C |
| ATOM | 14360 | CD1 | TYR D 406 | 57.171 118.076 78.109 1.00 15.16 | C |

| ATOM | 14362 | CE1 | TYR | D | 406 | 56.833 | 119.082 | 78.995 | 1.00 | 14.91 | C |
|------|-------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 14364 | CZ | TYR | D | 406 | 56.206 | 118.754 | 80.188 | 1.00 | 16.13 | C |
| ATOM | 14365 | OH | TYR | D | 406 | 55.846 | 119.695 | 81.104 | 1.00 | 14.27 | O |
| ATOM | 14367 | CE2 | TYR | D | 406 | 55.906 | 117.447 | 80.482 | 1.00 | 16.65 | C |
| ATOM | 14369 | CD2 | TYR | D | 406 | 56.232 | 116.453 | 79.584 | 1.00 | 16.33 | C |
| ATOM | 14371 | C | TYR | D | 406 | 58.746 | 114.666 | 79.142 | 1.00 | 19.41 | C |
| ATOM | 14372 | O | TYR | D | 406 | 59.028 | 115.485 | 79.976 | 1.00 | 19.36 | O |
| ATOM | 14373 | N | THR | D | 407 | 58.493 | 113.396 | 79.444 | 1.00 | 20.52 | N |
| ATOM | 14375 | CA | THR | D | 407 | 58.482 | 112.931 | 80.835 | 1.00 | 21.10 | C |
| ATOM | 14377 | CB | THR | D | 407 | 57.516 | 111.698 | 81.056 | 1.00 | 20.94 | C |
| ATOM | 14379 | OG1 | THR | D | 407 | 57.835 | 110.613 | 80.169 | 1.00 | 20.10 | O |
| ATOM | 14381 | CG2 | THR | D | 407 | 56.051 | 112.054 | 80.756 | 1.00 | 19.23 | C |
| ATOM | 14385 | C | THR | D | 407 | 59.906 | 112.630 | 81.289 | 1.00 | 22.45 | C |
| ATOM | 14386 | O | THR | D | 407 | 60.283 | 112.953 | 82.408 | 1.00 | 22.09 | O |
| ATOM | 14387 | N | ARG | D | 408 | 60.701 | 112.039 | 80.403 | 1.00 | 24.36 | N |
| ATOM | 14389 | CA | ARG | D | 408 | 62.096 | 111.730 | 80.698 | 1.00 | 26.24 | C |
| ATOM | 14391 | CB | ARG | D | 408 | 62.793 | 111.078 | 79.486 | 1.00 | 26.81 | C |
| ATOM | 14394 | CG | ARG | D | 408 | 64.370 | 111.225 | 79.434 | 1.00 | 30.29 | C |
| ATOM | 14397 | CD | ARG | D | 408 | 65.132 | 110.223 | 78.489 | 1.00 | 34.24 | C |
| ATOM | 14400 | NE | ARG | D | 408 | 64.408 | 108.944 | 78.269 | 1.00 | 37.86 | N |
| ATOM | 14402 | CZ | ARG | D | 408 | 63.554 | 108.681 | 77.252 | 1.00 | 38.72 | C |
| ATOM | 14403 | NH1 | ARG | D | 408 | 63.292 | 109.603 | 76.318 | 1.00 | 39.53 | N |
| ATOM | 14406 | NH2 | ARG | D | 408 | 62.956 | 107.486 | 77.169 | 1.00 | 37.88 | N |
| ATOM | 14409 | C | ARG | D | 408 | 62.817 | 112.997 | 81.095 | 1.00 | 27.27 | C |
| ATOM | 14410 | O | ARG | D | 408 | 63.692 | 112.956 | 81.959 | 1.00 | 27.78 | O |
| ATOM | 14411 | N | ILE | D | 409 | 62.431 | 114.115 | 80.464 | 1.00 | 28.53 | N |
| ATOM | 14413 | CA | ILE | D | 409 | 63.077 | 115.424 | 80.630 | 1.00 | 29.10 | C |
| ATOM | 14415 | CB | ILE | D | 409 | 63.066 | 116.182 | 79.281 | 1.00 | 29.21 | C |
| ATOM | 14417 | CG1 | ILE | D | 409 | 64.268 | 115.730 | 78.431 | 1.00 | 29.57 | C |
| ATOM | 14420 | CD1 | ILE | D | 409 | 64.193 | 116.098 | 76.959 | 1.00 | 29.86 | C |
| ATOM | 14424 | CG2 | ILE | D | 409 | 63.061 | 117.705 | 79.493 | 1.00 | 29.59 | C |
| ATOM | 14428 | C | ILE | D | 409 | 62.487 | 116.276 | 81.765 | 1.00 | 29.69 | C |
| ATOM | 14429 | O | ILE | D | 409 | 63.228 | 116.746 | 82.592 | 1.00 | 29.72 | O |
| ATOM | 14430 | N | LYS | D | 410 | 61.178 | 116.487 | 81.800 | 1.00 | 30.89 | N |
| ATOM | 14432 | CA | LYS | D | 410 | 60.531 | 117.179 | 82.918 | 1.00 | 32.02 | C |
| ATOM | 14434 | CB | LYS | D | 410 | 59.002 | 117.161 | 82.774 | 1.00 | 32.44 | C |
| ATOM | 14437 | CG | LYS | D | 410 | 58.190 | 117.327 | 84.113 | 1.00 | 32.79 | C |
| ATOM | 14440 | CD | LYS | D | 410 | 56.837 | 116.581 | 84.104 | 1.00 | 31.65 | C |
| ATOM | 14443 | CE | LYS | D | 410 | 55.787 | 117.260 | 85.007 | 1.00 | 30.17 | C |
| ATOM | 14446 | NZ | LYS | D | 410 | 56.117 | 117.221 | 86.431 | 1.00 | 28.02 | N |
| ATOM | 14450 | C | LYS | D | 410 | 60.875 | 116.538 | 84.243 | 1.00 | 33.11 | C |
| ATOM | 14451 | O | LYS | D | 410 | 61.362 | 117.206 | 85.148 | 1.00 | 33.27 | O |
| ATOM | 14452 | N | ARG | D | 411 | 60.585 | 115.245 | 84.363 | 1.00 | 34.55 | N |
| ATOM | 14454 | CA | ARG | D | 411 | 60.703 | 114.520 | 85.639 | 1.00 | 35.80 | C |
| ATOM | 14456 | CB | ARG | D | 411 | 59.308 | 114.044 | 86.094 | 1.00 | 36.44 | C |
| ATOM | 14459 | CG | ARG | D | 411 | 58.489 | 115.071 | 86.893 | 1.00 | 39.72 | C |
| ATOM | 14462 | CD | ARG | D | 411 | 58.082 | 114.617 | 88.323 | 1.00 | 44.12 | C |
| ATOM | 14465 | NE | ARG | D | 411 | 56.621 | 114.515 | 88.483 | 1.00 | 47.54 | N |

| ATOM | 14467 | CZ | ARG D 411 | 55.999 | 114.009 | 89.559 | 1.00 | 50.05 | C |
| ATOM | 14468 | NH1 | ARG D 411 | 56.695 | 113.552 | 90.609 | 1.00 | 50.31 | N |
| ATOM | 14471 | NH2 | ARG D 411 | 54.663 | 113.974 | 89.588 | 1.00 | 50.69 | N |
| ATOM | 14474 | C | ARG D 411 | 61.636 | 113.306 | 85.530 | 1.00 | 35.61 | C |
| ATOM | 14475 | O | ARG D 411 | 61.169 | 112.168 | 85.573 | 1.00 | 35.68 | O |
| ATOM | 14476 | N | PRO D 412 | 62.947 | 113.518 | 85.419 | 1.00 | 35.51 | N |
| ATOM | 14477 | CA | PRO D 412 | 63.854 | 112.390 | 85.140 | 1.00 | 35.54 | C |
| ATOM | 14479 | CB | PRO D 412 | 65.249 | 113.049 | 85.043 | 1.00 | 35.48 | C |
| ATOM | 14482 | CG | PRO D 412 | 65.101 | 114.467 | 85.498 | 1.00 | 35.29 | C |
| ATOM | 14485 | CD | PRO D 412 | 63.656 | 114.800 | 85.575 | 1.00 | 35.29 | C |
| ATOM | 14488 | C | PRO D 412 | 63.811 | 111.271 | 86.211 | 1.00 | 35.66 | C |
| ATOM | 14489 | O | PRO D 412 | 64.209 | 110.132 | 85.929 | 1.00 | 35.74 | O |
| ATOM | 14490 | N | GLN D 413 | 63.280 | 111.594 | 87.394 | 1.00 | 35.64 | N |
| ATOM | 14492 | CA | GLN D 413 | 63.360 | 110.739 | 88.585 | 1.00 | 35.41 | C |
| ATOM | 14494 | CB | GLN D 413 | 63.624 | 111.604 | 89.827 | 1.00 | 35.43 | C |
| ATOM | 14497 | CG | GLN D 413 | 64.420 | 112.883 | 89.582 | 1.00 | 35.38 | C |
| ATOM | 14500 | CD | GLN D 413 | 65.705 | 112.904 | 90.352 | 1.00 | 35.03 | C |
| ATOM | 14501 | OE1 | GLN D 413 | 65.725 | 113.297 | 91.515 | 1.00 | 34.71 | O |
| ATOM | 14502 | NE2 | GLN D 413 | 66.788 | 112.476 | 89.712 | 1.00 | 35.14 | N |
| ATOM | 14505 | C | GLN D 413 | 62.107 | 109.877 | 88.846 | 1.00 | 35.14 | C |
| ATOM | 14506 | O | GLN D 413 | 62.034 | 109.185 | 89.868 | 1.00 | 35.15 | O |
| ATOM | 14507 | N | ASP D 414 | 61.124 | 109.937 | 87.952 | 1.00 | 34.61 | N |
| ATOM | 14509 | CA | ASP D 414 | 59.931 | 109.106 | 88.057 | 1.00 | 34.34 | C |
| ATOM | 14511 | CB | ASP D 414 | 58.702 | 109.985 | 88.325 | 1.00 | 34.59 | C |
| ATOM | 14514 | CG | ASP D 414 | 57.478 | 109.181 | 88.766 | 1.00 | 35.67 | C |
| ATOM | 14515 | OD1 | ASP D 414 | 57.651 | 108.168 | 89.474 | 1.00 | 35.66 | O |
| ATOM | 14516 | OD2 | ASP D 414 | 56.296 | 109.494 | 88.467 | 1.00 | 37.51 | O |
| ATOM | 14517 | C | ASP D 414 | 59.774 | 108.314 | 86.762 | 1.00 | 33.63 | C |
| ATOM | 14518 | O | ASP D 414 | 59.101 | 108.754 | 85.850 | 1.00 | 33.48 | O |
| ATOM | 14519 | N | GLN D 415 | 60.427 | 107.159 | 86.676 | 1.00 | 33.06 | N |
| ATOM | 14521 | CA | GLN D 415 | 60.407 | 106.343 | 85.453 | 1.00 | 32.58 | C |
| ATOM | 14523 | CB | GLN D 415 | 61.481 | 105.242 | 85.500 | 1.00 | 32.89 | C |
| ATOM | 14526 | CG | GLN D 415 | 62.742 | 105.530 | 84.689 | 1.00 | 33.42 | C |
| ATOM | 14529 | CD | GLN D 415 | 63.769 | 104.401 | 84.790 | 1.00 | 34.07 | C |
| ATOM | 14530 | OE1 | GLN D 415 | 63.678 | 103.410 | 84.069 | 1.00 | 34.50 | O |
| ATOM | 14531 | NE2 | GLN D 415 | 64.742 | 104.551 | 85.685 | 1.00 | 34.30 | N |
| ATOM | 14534 | C | GLN D 415 | 59.034 | 105.706 | 85.198 | 1.00 | 31.88 | C |
| ATOM | 14535 | O | GLN D 415 | 58.685 | 105.460 | 84.044 | 1.00 | 31.77 | O |
| ATOM | 14536 | N | LEU D 416 | 58.268 | 105.459 | 86.268 | 1.00 | 30.95 | N |
| ATOM | 14538 | CA | LEU D 416 | 56.920 | 104.880 | 86.177 | 1.00 | 30.43 | C |
| ATOM | 14540 | CB | LEU D 416 | 56.521 | 104.222 | 87.489 | 1.00 | 30.43 | C |
| ATOM | 14543 | CG | LEU D 416 | 57.531 | 103.266 | 88.119 | 1.00 | 31.29 | C |
| ATOM | 14545 | CD1 | LEU D 416 | 57.081 | 102.858 | 89.539 | 1.00 | 31.25 | C |
| ATOM | 14549 | CD2 | LEU D 416 | 57.737 | 102.053 | 87.210 | 1.00 | 31.92 | C |
| ATOM | 14553 | C | LEU D 416 | 55.839 | 105.898 | 85.858 | 1.00 | 29.89 | C |
| ATOM | 14554 | O | LEU D 416 | 54.700 | 105.549 | 85.668 | 1.00 | 30.26 | O |
| ATOM | 14555 | N | ARG D 417 | 56.192 | 107.166 | 85.845 | 1.00 | 29.36 | N |
| ATOM | 14557 | CA | ARG D 417 | 55.268 | 108.235 | 85.513 | 1.00 | 28.75 | C |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 14559 | CB | ARG | D | 417 | 56.056 | 109.542 | 85.476 | 1.00 29.25 | C |
| ATOM | 14562 | CG | ARG | D | 417 | 55.308 | 110.758 | 85.888 | 1.00 31.25 | C |
| ATOM | 14565 | CD | ARG | D | 417 | 55.780 | 112.009 | 85.138 | 1.00 33.19 | C |
| ATOM | 14568 | NE | ARG | D | 417 | 55.266 | 113.199 | 85.785 | 1.00 34.76 | N |
| ATOM | 14570 | CZ | ARG | D | 417 | 53.993 | 113.513 | 85.807 | 1.00 37.31 | C |
| ATOM | 14571 | NH1 | ARG | D | 417 | 53.109 | 112.745 | 85.184 | 1.00 39.76 | N |
| ATOM | 14574 | NH2 | ARG | D | 417 | 53.588 | 114.610 | 86.426 | 1.00 38.44 | N |
| ATOM | 14577 | C | ARG | D | 417 | 54.618 | 107.990 | 84.148 | 1.00 27.48 | C |
| ATOM | 14578 | O | ARG | D | 417 | 53.385 | 107.942 | 84.021 | 1.00 27.07 | O |
| ATOM | 14579 | N | PHE | D | 418 | 55.457 | 107.834 | 83.127 | 1.00 25.85 | N |
| ATOM | 14581 | CA | PHE | D | 418 | 54.958 | 107.667 | 81.766 | 1.00 24.54 | C |
| ATOM | 14583 | CB | PHE | D | 418 | 56.122 | 107.534 | 80.769 | 1.00 24.61 | C |
| ATOM | 14586 | CG | PHE | D | 418 | 55.696 | 107.188 | 79.378 | 1.00 23.32 | C |
| ATOM | 14587 | CD1 | PHE | D | 418 | 54.917 | 108.078 | 78.641 | 1.00 22.26 | C |
| ATOM | 14589 | CE1 | PHE | D | 418 | 54.518 | 107.786 | 77.357 | 1.00 22.16 | C |
| ATOM | 14591 | CZ | PHE | D | 418 | 54.891 | 106.587 | 76.783 | 1.00 24.31 | C |
| ATOM | 14593 | CE2 | PHE | D | 418 | 55.679 | 105.676 | 77.526 | 1.00 25.48 | C |
| ATOM | 14595 | CD2 | PHE | D | 418 | 56.076 | 105.989 | 78.810 | 1.00 23.20 | C |
| ATOM | 14597 | C | PHE | D | 418 | 53.974 | 106.500 | 81.655 | 1.00 23.42 | C |
| ATOM | 14598 | O | PHE | D | 418 | 52.875 | 106.688 | 81.148 | 1.00 22.44 | O |
| ATOM | 14599 | N | PRO | D | 419 | 54.361 | 105.298 | 82.096 | 1.00 22.50 | N |
| ATOM | 14600 | CA | PRO | D | 419 | 53.443 | 104.152 | 82.092 | 1.00 21.99 | C |
| ATOM | 14602 | CB | PRO | D | 419 | 54.321 | 102.995 | 82.532 | 1.00 21.81 | C |
| ATOM | 14605 | CG | PRO | D | 419 | 55.475 | 103.565 | 83.062 | 1.00 22.24 | C |
| ATOM | 14608 | CD | PRO | D | 419 | 55.711 | 104.889 | 82.483 | 1.00 22.02 | C |
| ATOM | 14611 | C | PRO | D | 419 | 52.198 | 104.274 | 82.958 | 1.00 21.58 | C |
| ATOM | 14612 | O | PRO | D | 419 | 51.164 | 103.814 | 82.550 | 1.00 20.83 | O |
| ATOM | 14613 | N | ARG | D | 420 | 52.267 | 104.906 | 84.102 | 1.00 21.99 | N |
| ATOM | 14615 | CA | ARG | D | 420 | 51.044 | 105.174 | 84.843 | 1.00 23.26 | C |
| ATOM | 14617 | CB | ARG | D | 420 | 51.349 | 105.893 | 86.160 | 1.00 23.88 | C |
| ATOM | 14620 | CG | ARG | D | 420 | 51.870 | 104.968 | 87.251 | 1.00 26.16 | C |
| ATOM | 14623 | CD | ARG | D | 420 | 51.849 | 105.581 | 88.622 | 1.00 29.60 | C |
| ATOM | 14626 | NE | ARG | D | 420 | 53.001 | 105.155 | 89.403 | 1.00 32.35 | N |
| ATOM | 14628 | CZ | ARG | D | 420 | 54.079 | 105.901 | 89.662 | 1.00 35.11 | C |
| ATOM | 14629 | NH1 | ARG | D | 420 | 54.197 | 107.158 | 89.217 | 1.00 35.49 | N |
| ATOM | 14632 | NH2 | ARG | D | 420 | 55.056 | 105.378 | 90.398 | 1.00 36.26 | N |
| ATOM | 14635 | C | ARG | D | 420 | 50.037 | 106.008 | 84.047 | 1.00 23.47 | C |
| ATOM | 14636 | O | ARG | D | 420 | 48.821 | 105.857 | 84.213 | 1.00 23.23 | O |
| ATOM | 14637 | N | MET | D | 421 | 50.539 | 106.904 | 83.205 | 1.00 23.89 | N |
| ATOM | 14639 | CA | MET | D | 421 | 49.664 | 107.759 | 82.417 | 1.00 24.26 | C |
| ATOM | 14641 | CB | MET | D | 421 | 50.419 | 108.942 | 81.815 | 1.00 24.93 | C |
| ATOM | 14644 | CG | MET | D | 421 | 51.175 | 109.808 | 82.828 | 1.00 26.72 | C |
| ATOM | 14647 | SD | MET | D | 421 | 52.122 | 111.087 | 82.001 | 1.00 29.13 | S |
| ATOM | 14648 | CE | MET | D | 421 | 50.840 | 111.852 | 81.119 | 1.00 31.24 | C |
| ATOM | 14652 | C | MET | D | 421 | 49.016 | 106.984 | 81.306 | 1.00 23.71 | C |
| ATOM | 14653 | O | MET | D | 421 | 47.846 | 107.178 | 81.053 | 1.00 23.34 | O |
| ATOM | 14654 | N | LEU | D | 422 | 49.778 | 106.117 | 80.636 | 1.00 23.83 | N |
| ATOM | 14656 | CA | LEU | D | 422 | 49.211 | 105.221 | 79.611 | 1.00 23.76 | C |

ATOM 14658 CB  LEU D 422    50.283 104.347 78.963 1.00 23.64        C
ATOM 14661 CG  LEU D 422    51.351 105.058 78.132 1.00 24.63        C
ATOM 14663 CD1 LEU D 422    52.224 104.051 77.470 1.00 26.16        C
ATOM 14667 CD2 LEU D 422    50.771 105.927 77.085 1.00 25.19        C
ATOM 14671 C   LEU D 422    48.141 104.335 80.217 1.00 23.44        C
ATOM 14672 O   LEU D 422    47.150 104.031 79.586 1.00 23.45        O
ATOM 14673 N   MET D 423    48.326 103.952 81.464 1.00 23.51        N
ATOM 14675 CA  MET D 423    47.413 103.037 82.103 1.00 23.89        C
ATOM 14677 CB  MET D 423    48.065 102.407 83.324 1.00 24.92        C
ATOM 14680 CG  MET D 423    48.117 100.894 83.262 1.00 29.02        C
ATOM 14683 SD  MET D 423    49.756 100.266 82.996 1.00 36.10        S
ATOM 14684 CE  MET D 423    50.270 100.108 84.644 1.00 35.85        C
ATOM 14688 C   MET D 423    46.125 103.730 82.488 1.00 22.97        C
ATOM 14689 O   MET D 423    45.111 103.097 82.699 1.00 22.90        O
ATOM 14690 N   LYS D 424    46.131 105.042 82.569 1.00 22.20        N
ATOM 14692 CA  LYS D 424    44.872 105.722 82.782 1.00 21.40        C
ATOM 14694 CB  LYS D 424    45.105 107.150 83.278 1.00 21.57        C
ATOM 14697 CG  LYS D 424    45.961 107.252 84.560 1.00 21.85        C
ATOM 14700 CD  LYS D 424    45.176 106.906 85.803 1.00 23.55        C
ATOM 14703 CE  LYS D 424    46.086 106.499 86.958 1.00 26.09        C
ATOM 14706 NZ  LYS D 424    46.502 105.039 86.931 1.00 25.70        N
ATOM 14710 C   LYS D 424    44.026 105.664 81.485 1.00 20.77        C
ATOM 14711 O   LYS D 424    42.799 105.745 81.557 1.00 20.70        O
ATOM 14712 N   LEU D 425    44.655 105.508 80.311 1.00 19.71        N
ATOM 14714 CA  LEU D 425    43.888 105.269 79.056 1.00 19.37        C
ATOM 14716 CB  LEU D 425    44.767 105.258 77.786 1.00 19.22        C
ATOM 14719 CG  LEU D 425    45.631 106.510 77.569 1.00 19.46        C
ATOM 14721 CD1 LEU D 425    46.741 106.209 76.606 1.00 20.06        C
ATOM 14725 CD2 LEU D 425    44.793 107.672 77.105 1.00 18.98        C
ATOM 14729 C   LEU D 425    43.117 103.956 79.138 1.00 18.66        C
ATOM 14730 O   LEU D 425    42.015 103.834 78.597 1.00 18.91        O
ATOM 14731 N   VAL D 426    43.704 102.982 79.828 1.00 17.67        N
ATOM 14733 CA  VAL D 426    43.076 101.685 80.040 1.00 16.70        C
ATOM 14735 CB  VAL D 426    44.030 100.736 80.747 1.00 16.59        C
ATOM 14737 CG1 VAL D 426    43.374  99.410 80.951 1.00 16.22        C
ATOM 14741 CG2 VAL D 426    45.325 100.574 79.950 1.00 16.64        C
ATOM 14745 C   VAL D 426    41.835 101.872 80.897 1.00 16.09        C
ATOM 14746 O   VAL D 426    40.722 101.485 80.524 1.00 14.69        O
ATOM 14747 N   SER D 427    42.041 102.505 82.044 1.00 15.87        N
ATOM 14749 CA  SER D 427    40.922 102.904 82.897 1.00 16.06        C
ATOM 14751 CB  SER D 427    41.417 103.777 84.032 1.00 15.33        C
ATOM 14754 OG  SER D 427    42.222 102.987 84.849 1.00 15.12        O
ATOM 14756 C   SER D 427    39.811 103.624 82.127 1.00 16.35        C
ATOM 14757 O   SER D 427    38.634 103.373 82.353 1.00 15.56        O
ATOM 14758 N   LEU D 428    40.198 104.493 81.210 1.00 17.44        N
ATOM 14760 CA  LEU D 428    39.234 105.305 80.471 1.00 18.87        C
ATOM 14762 CB  LEU D 428    39.935 106.401 79.629 1.00 19.18        C
ATOM 14765 CG  LEU D 428    40.366 107.614 80.448 1.00 19.96        C

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ATOM 14767 CD1 LEU D 428    41.417 108.412 79.734 1.00 21.00    C
ATOM 14771 CD2 LEU D 428    39.153 108.468 80.740 1.00 21.25    C
ATOM 14775 C   LEU D 428    38.334 104.440 79.593 1.00 19.28    C
ATOM 14776 O   LEU D 428    37.184 104.791 79.387 1.00 19.13    O
ATOM 14777 N   ARG D 429    38.846 103.318 79.085 1.00 19.93    N
ATOM 14779 CA  ARG D 429    37.989 102.374 78.371 1.00 20.40    C
ATOM 14781 CB  ARG D 429    38.795 101.180 77.848 1.00 20.56    C
ATOM 14784 CG  ARG D 429    39.753 101.536 76.746 1.00 20.68    C
ATOM 14787 CD  ARG D 429    39.084 102.241 75.590 1.00 22.12    C
ATOM 14790 NE  ARG D 429    40.030 102.849 74.663 1.00 23.03    N
ATOM 14792 CZ  ARG D 429    40.429 102.299 73.527 1.00 23.00    C
ATOM 14793 NH1 ARG D 429    39.960 101.113 73.155 1.00 22.44    N
ATOM 14796 NH2 ARG D 429    41.294 102.948 72.758 1.00 22.24    N
ATOM 14799 C   ARG D 429    36.876 101.892 79.269 1.00 20.37    C
ATOM 14800 O   ARG D 429    35.725 102.054 78.975 1.00 20.47    O
ATOM 14801 N   THR D 430    37.241 101.304 80.388 1.00 20.88    N
ATOM 14803 CA  THR D 430    36.261 100.795 81.311 1.00 20.80    C
ATOM 14805 CB  THR D 430    36.964 100.260 82.527 1.00 20.78    C
ATOM 14807 OG1 THR D 430    37.642 99.059 82.162 1.00 20.52     O
ATOM 14809 CG2 THR D 430    35.968 99.830 83.570 1.00 21.13     C
ATOM 14813 C   THR D 430    35.223 101.833 81.709 1.00 20.95    C
ATOM 14814 O   THR D 430    34.040 101.505 81.732 1.00 21.43    O
ATOM 14815 N   LEU D 431    35.656 103.061 82.031 1.00 20.54    N
ATOM 14817 CA  LEU D 431    34.749 104.140 82.477 1.00 20.19    C
ATOM 14819 CB  LEU D 431    35.526 105.346 83.034 1.00 20.21    C
ATOM 14822 CG  LEU D 431    36.303 105.113 84.328 1.00 20.32    C
ATOM 14824 CD1 LEU D 431    37.465 106.062 84.469 1.00 20.58    C
ATOM 14828 CD2 LEU D 431    35.395 105.222 85.522 1.00 21.74    C
ATOM 14832 C   LEU D 431    33.825 104.619 81.356 1.00 20.15    C
ATOM 14833 O   LEU D 431    32.703 105.037 81.613 1.00 20.28    O
ATOM 14834 N   SER D 432    34.304 104.570 80.119 1.00 19.98    N
ATOM 14836 CA  SER D 432    33.454 104.740 78.954 1.00 20.33    C
ATOM 14838 CB  SER D 432    34.276 104.563 77.686 1.00 20.57    C
ATOM 14841 OG  SER D 432    33.496 104.797 76.542 1.00 22.05    O
ATOM 14843 C   SER D 432    32.280 103.754 78.949 1.00 20.25    C
ATOM 14844 O   SER D 432    31.147 104.144 78.686 1.00 20.04    O
ATOM 14845 N   SER D 433    32.543 102.483 79.241 1.00 20.49    N
ATOM 14847 CA  SER D 433    31.457 101.503 79.409 1.00 21.09    C
ATOM 14849 CB  SER D 433    31.982 100.082 79.627 1.00 20.76    C
ATOM 14852 OG  SER D 433    32.633 99.597 78.477 1.00 21.59     O
ATOM 14854 C   SER D 433    30.523 101.866 80.575 1.00 21.52    C
ATOM 14855 O   SER D 433    29.292 101.731 80.455 1.00 21.68    O
ATOM 14856 N   VAL D 434    31.098 102.308 81.703 1.00 21.43    N
ATOM 14858 CA  VAL D 434    30.290 102.612 82.880 1.00 21.01    C
ATOM 14860 CB  VAL D 434    31.151 102.911 84.139 1.00 20.94    C
ATOM 14862 CG1 VAL D 434    30.306 103.477 85.278 1.00 19.93    C
ATOM 14866 CG2 VAL D 434    31.849 101.639 84.591 1.00 20.57    C
ATOM 14870 C   VAL D 434    29.340 103.749 82.520 1.00 20.91    C
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ATOM 14871 O   VAL D 434    28.181 103.740 82.932 1.00 20.75        O
ATOM 14872 N   HIS D 435    29.812 104.690 81.709 1.00 20.77        N
ATOM 14874 CA  HIS D 435    28.947 105.756 81.223 1.00 20.87        C
ATOM 14876 CB  HIS D 435    29.755 106.781 80.437 1.00 20.96        C
ATOM 14879 CG  HIS D 435    28.948 107.955 79.983 1.00 20.27        C
ATOM 14880 ND1 HIS D 435    28.610 108.153 78.664 1.00 19.83        N
ATOM 14882 CE1 HIS D 435    27.899 109.261 78.564 1.00 20.87        C
ATOM 14884 NE2 HIS D 435    27.768 109.787 79.768 1.00 19.82        N
ATOM 14886 CD2 HIS D 435    28.412 108.989 80.673 1.00 19.48        C
ATOM 14888 C   HIS D 435    27.785 105.218 80.364 1.00 21.06        C
ATOM 14889 O   HIS D 435    26.653 105.667 80.513 1.00 20.43        O
ATOM 14890 N   SER D 436    28.066 104.251 79.492 1.00 21.62        N
ATOM 14892 CA  SER D 436    27.048 103.693 78.597 1.00 22.25        C
ATOM 14894 CB  SER D 436    27.635 102.613 77.673 1.00 22.24        C
ATOM 14897 OG  SER D 436    28.544 103.161 76.746 1.00 22.26        O
ATOM 14899 C   SER D 436    25.900 103.098 79.376 1.00 23.00        C
ATOM 14900 O   SER D 436    24.731 103.265 79.004 1.00 22.72        O
ATOM 14901 N   GLU D 437    26.244 102.374 80.442 1.00 24.39        N
ATOM 14903 CA  GLU D 437    25.248 101.785 81.336 1.00 25.46        C
ATOM 14905 CB  GLU D 437    25.886 100.835 82.374 1.00 26.10        C
ATOM 14908 CG  GLU D 437    26.469 99.507 81.849 1.00 29.07        C
ATOM 14911 CD  GLU D 437    27.834 99.149 82.489 1.00 33.54        C
ATOM 14912 OE1 GLU D 437    28.743 98.623 81.792 1.00 35.86        O
ATOM 14913 OE2 GLU D 437    28.027 99.402 83.705 1.00 36.22        O
ATOM 14914 C   GLU D 437    24.473 102.911 82.029 1.00 25.31        C
ATOM 14915 O   GLU D 437    23.283 102.795 82.201 1.00 25.02        O
ATOM 14916 N   GLN D 438    25.149 104.004 82.391 1.00 25.86        N
ATOM 14918 CA  GLN D 438    24.489 105.178 82.982 1.00 26.26        C
ATOM 14920 CB  GLN D 438    25.511 106.198 83.535 1.00 25.96        C.
ATOM 14923 CG  GLN D 438    24.913 107.543 84.040 1.00 25.07        C
ATOM 14926 CD  GLN D 438    23.981 107.423 85.262 1.00 23.70        C
ATOM 14927 OE1 GLN D 438    24.329 107.882 86.341 1.00 23.20        O
ATOM 14928 NE2 GLN D 438    22.802 106.843 85.078 1.00 20.30        N
ATOM 14931 C   GLN D 438    23.476 105.859 82.044 1.00 26.98        C
ATOM 14932 O   GLN D 438    22.394 106.234 82.496 1.00 26.77        O
ATOM 14933 N   VAL D 439    23.790 106.006 80.756 1.00 28.01        N
ATOM 14935 CA  VAL D 439    22.793 106.566 79.825 1.00 29.01        C
ATOM 14937 CB  VAL D 439    23.380 107.177 78.503 1.00 28.96        C
ATOM 14939 CG1 VAL D 439    24.868 107.455 78.621 1.00 29.12        C
ATOM 14943 CG2 VAL D 439    23.059 106.329 77.253 1.00 28.94        C
ATOM 14947 C   VAL D 439    21.681 105.562 79.515 1.00 29.89        C
ATOM 14948 O   VAL D 439    20.596 105.959 79.118 1.00 30.22        O
ATOM 14949 N   PHE D 440    21.948 104.275 79.707 1.00 30.95        N
ATOM 14951 CA  PHE D 440    20.925 103.243 79.536 1.00 31.85        C
ATOM 14953 CB  PHE D 440    21.595 101.873 79.329 1.00 32.19        C
ATOM 14956 CG  PHE D 440    20.629 100.727 79.119 1.00 32.84        C
ATOM 14957 CD1 PHE D 440    20.052 100.503 77.870 1.00 33.02        C
ATOM 14959 CE1 PHE D 440    19.169 99.434 77.679 1.00 33.73        C
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ATOM 14961 CZ  PHE D 440    18.864  98.571 78.748 1.00 33.65      C
ATOM 14963 CE2 PHE D 440    19.440  98.780 79.999 1.00 33.58      C
ATOM 14965 CD2 PHE D 440    20.323  99.850 80.178 1.00 34.01      C
ATOM 14967 C   PHE D 440    19.955 103.201 80.728 1.00 32.06      C
ATOM 14968 O   PHE D 440    18.838 102.719 80.588 1.00 32.15      O
ATOM 14969 N   ALA D 441    20.370 103.711 81.886 1.00 32.36      N
ATOM 14971 CA  ALA D 441    19.538 103.664 83.087 1.00 32.82      C
ATOM 14973 CB  ALA D 441    20.377 103.888 84.327 1.00 32.64      C
ATOM 14977 C   ALA D 441    18.414 104.696 83.010 1.00 33.50      C
ATOM 14978 O   ALA D 441    17.235 104.359 83.161 1.00 33.86      O
ATOM 14979 N   LEU D 442    18.786 105.952 82.776 1.00 34.19      N
ATOM 14981 CA  LEU D 442    17.814 107.021 82.533 1.00 34.50      C
ATOM 14983 CB  LEU D 442    18.474 108.413 82.454 1.00 34.50      C
ATOM 14986 CG  LEU D 442    19.975 108.588 82.129 1.00 33.86      C
ATOM 14988 CD1 LEU D 442    20.188 109.612 81.037 1.00 33.44      C
ATOM 14992 CD2 LEU D 442    20.760 108.988 83.370 1.00 33.45      C
ATOM 14996 C   LEU D 442    17.008 106.750 81.261 1.00 35.15      C
ATOM 14997 O   LEU D 442    15.887 107.229 81.148 1.00 35.60      O
ATOM 14998 N   ARG D 443    17.573 105.987 80.317 1.00 35.82      N
ATOM 15000 CA  ARG D 443    16.841 105.517 79.125 1.00 36.37      C
ATOM 15002 CB  ARG D 443    17.797 105.356 77.923 1.00 36.58      C
ATOM 15005 CG  ARG D 443    17.097 105.137 76.553 1.00 38.14      C
ATOM 15008 CD  ARG D 443    16.997 103.655 76.076 1.00 39.77      C
ATOM 15011 NE  ARG D 443    17.251 103.509 74.638 1.00 40.64      N
ATOM 15013 CZ  ARG D 443    18.456 103.611 74.053 1.00 41.64      C
ATOM 15014 NH1 ARG D 443    19.564 103.859 74.761 1.00 41.55      N
ATOM 15017 NH2 ARG D 443    18.553 103.465 72.739 1.00 41.66      N
ATOM 15020 C   ARG D 443    16.101 104.189 79.388 1.00 36.19      C
ATOM 15021 O   ARG D 443    15.027 104.153 80.001 1.00 35.94      O
ATOM 15022 N   LYS D 448    15.998 111.025 79.247 1.00 25.17      N
ATOM 15024 CA  LYS D 448    16.215 111.075 77.810 1.00 25.29      C
ATOM 15026 CB  LYS D 448    14.890 111.330 77.087 1.00 25.32      C
ATOM 15029 CG  LYS D 448    14.022 110.071 76.873 1.00 25.72      C
ATOM 15032 CD  LYS D 448    12.780 109.988 77.802 1.00 25.03      C
ATOM 15035 CE  LYS D 448    12.612 108.584 78.394 1.00 24.27      C
ATOM 15038 NZ  LYS D 448    11.754 108.554 79.610 1.00 23.62      N
ATOM 15042 C   LYS D 448    17.243 112.154 77.448 1.00 25.39      C
ATOM 15043 O   LYS D 448    17.111 113.311 77.833 1.00 25.06      O
ATOM 15044 N   LEU D 449    18.269 111.757 76.699 1.00 25.86      N
ATOM 15046 CA  LEU D 449    19.361 112.652 76.323 1.00 26.04      C
ATOM 15048 CB  LEU D 449    20.559 111.864 75.806 1.00 25.94      C
ATOM 15051 CG  LEU D 449    21.493 111.168 76.782 1.00 26.55      C
ATOM 15053 CD1 LEU D 449    22.818 110.928 76.073 1.00 27.14      C
ATOM 15057 CD2 LEU D 449    21.715 111.946 78.057 1.00 26.67      C
ATOM 15061 C   LEU D 449    18.964 113.622 75.224 1.00 26.24      C
ATOM 15062 O   LEU D 449    18.307 113.239 74.246 1.00 26.12      O
ATOM 15063 N   PRO D 450    19.420 114.864 75.343 1.00 26.53      N
ATOM 15064 CA  PRO D 450    19.144 115.863 74.308 1.00 26.76      C
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| ATOM | 15066 | CB | PRO D 450 | 19.740 | 117.152 | 74.882 | 1.00 | 26.75 | C |
|------|-------|-----|-----------|--------|---------|--------|------|-------|---|
| ATOM | 15069 | CG | PRO D 450 | 20.740 | 116.696 | 75.915 | 1.00 | 26.72 | C |
| ATOM | 15072 | CD | PRO D 450 | 20.256 | 115.399 | 76.436 | 1.00 | 26.46 | C |
| ATOM | 15075 | C | PRO D 450 | 19.835 | 115.441 | 73.018 | 1.00 | 26.95 | C |
| ATOM | 15076 | O | PRO D 450 | 20.900 | 114.858 | 73.115 | 1.00 | 26.62 | O |
| ATOM | 15077 | N | PRO D 451 | 19.251 | 115.714 | 71.852 | 1.00 | 27.50 | N |
| ATOM | 15078 | CA | PRO D 451 | 19.740 | 115.142 | 70.583 | 1.00 | 27.73 | C |
| ATOM | 15080 | CB | PRO D 451 | 18.949 | 115.895 | 69.504 | 1.00 | 27.70 | C |
| ATOM | 15083 | CG | PRO D 451 | 17.763 | 116.483 | 70.188 | 1.00 | 27.55 | C |
| ATOM | 15086 | CD | PRO D 451 | 18.078 | 116.587 | 71.655 | 1.00 | 27.45 | C |
| ATOM | 15089 | C | PRO D 451 | 21.234 | 115.299 | 70.326 | 1.00 | 27.94 | C |
| ATOM | 15090 | O | PRO D 451 | 21.815 | 114.398 | 69.720 | 1.00 | 28.24 | O |
| ATOM | 15091 | N | LEU D 452 | 21.842 | 116.403 | 70.760 | 1.00 | 28.06 | N |
| ATOM | 15093 | CA | LEU D 452 | 23.266 | 116.642 | 70.473 | 1.00 | 28.36 | C |
| ATOM | 15095 | CB | LEU D 452 | 23.682 | 118.095 | 70.828 | 1.00 | 28.65 | C |
| ATOM | 15098 | CG | LEU D 452 | 22.854 | 119.281 | 70.231 | 1.00 | 29.52 | C |
| ATOM | 15100 | CD1 | LEU D 452 | 21.801 | 119.881 | 71.212 | 1.00 | 29.54 | C |
| ATOM | 15104 | CD2 | LEU D 452 | 23.744 | 120.418 | 69.669 | 1.00 | 29.58 | C |
| ATOM | 15108 | C | LEU D 452 | 24.161 | 115.589 | 71.170 | 1.00 | 28.18 | C |
| ATOM | 15109 | O | LEU D 452 | 25.193 | 115.191 | 70.625 | 1.00 | 28.53 | O |
| ATOM | 15110 | N | LEU D 453 | 23.741 | 115.135 | 72.356 | 1.00 | 27.86 | N |
| ATOM | 15112 | CA | LEU D 453 | 24.408 | 114.059 | 73.097 | 1.00 | 27.60 | C |
| ATOM | 15114 | CB | LEU D 453 | 24.267 | 114.294 | 74.599 | 1.00 | 27.44 | C |
| ATOM | 15117 | CG | LEU D 453 | 24.831 | 115.612 | 75.121 | 1.00 | 26.81 | C |
| ATOM | 15119 | CD1 | LEU D 453 | 24.530 | 115.780 | 76.600 | 1.00 | 26.12 | C |
| ATOM | 15123 | CD2 | LEU D 453 | 26.325 | 115.688 | 74.855 | 1.00 | 26.44 | C |
| ATOM | 15127 | C | LEU D 453 | 23.876 | 112.659 | 72.768 | 1.00 | 27.82 | C |
| ATOM | 15128 | O | LEU D 453 | 24.595 | 111.668 | 72.906 | 1.00 | 27.68 | O |
| ATOM | 15129 | N | SER D 454 | 22.619 | 112.581 | 72.340 | 1.00 | 28.20 | N |
| ATOM | 15131 | CA | SER D 454 | 22.003 | 111.311 | 71.948 | 1.00 | 28.50 | C |
| ATOM | 15133 | CB | SER D 454 | 20.494 | 111.494 | 71.754 | 1.00 | 28.31 | C |
| ATOM | 15136 | OG | SER D 454 | 19.990 | 110.600 | 70.781 | 1.00 | 28.47 | O |
| ATOM | 15138 | C | SER D 454 | 22.648 | 110.721 | 70.681 | 1.00 | 28.88 | C |
| ATOM | 15139 | O | SER D 454 | 22.639 | 109.519 | 70.480 | 1.00 | 28.85 | O |
| ATOM | 15140 | N | GLU D 455 | 23.225 | 111.572 | 69.845 | 1.00 | 29.68 | N |
| ATOM | 15142 | CA | GLU D 455 | 23.884 | 111.124 | 68.620 | 1.00 | 30.43 | C |
| ATOM | 15144 | CB | GLU D 455 | 24.142 | 112.310 | 67.664 | 1.00 | 30.88 | C |
| ATOM | 15147 | CG | GLU D 455 | 23.906 | 111.988 | 66.179 | 1.00 | 33.31 | C |
| ATOM | 15150 | CD | GLU D 455 | 25.186 | 111.630 | 65.404 | 1.00 | 36.35 | C |
| ATOM | 15151 | OE1 | GLU D 455 | 25.126 | 111.618 | 64.139 | 1.00 | 38.01 | O |
| ATOM | 15152 | OE2 | GLU D 455 | 26.246 | 111.364 | 66.042 | 1.00 | 37.44 | O |
| ATOM | 15153 | C | GLU D 455 | 25.188 | 110.396 | 68.931 | 1.00 | 30.06 | C |
| ATOM | 15154 | O | GLU D 455 | 25.619 | 109.522 | 68.178 | 1.00 | 30.05 | O |
| ATOM | 15155 | N | ILE D 456 | 25.791 | 110.741 | 70.058 | 1.00 | 29.91 | N |
| ATOM | 15157 | CA | ILE D 456 | 27.125 | 110.254 | 70.396 | 1.00 | 30.08 | C |
| ATOM | 15159 | CB | ILE D 456 | 27.916 | 111.336 | 71.167 | 1.00 | 30.17 | C |
| ATOM | 15161 | CG1 | ILE D 456 | 27.740 | 112.718 | 70.543 | 1.00 | 30.89 | C |
| ATOM | 15164 | CD1 | ILE D 456 | 28.139 | 113.837 | 71.473 | 1.00 | 31.69 | C |

| ATOM | 15168 | CG2 | ILE | D | 456 | 29.396 | 110.993 | 71.206 | 1.00 | 30.54 | C |
| ATOM | 15172 | C | ILE | D | 456 | 27.066 | 109.011 | 71.270 | 1.00 | 29.78 | C |
| ATOM | 15173 | O | ILE | D | 456 | 27.967 | 108.157 | 71.226 | 1.00 | 29.77 | O |
| ATOM | 15174 | N | TRP | D | 457 | 26.013 | 108.920 | 72.075 | 1.00 | 29.47 | N |
| ATOM | 15176 | CA | TRP | D | 457 | 26.004 | 107.986 | 73.185 | 1.00 | 29.20 | C |
| ATOM | 15178 | CB | TRP | D | 457 | 25.949 | 108.761 | 74.496 | 1.00 | 29.03 | C |
| ATOM | 15181 | CG | TRP | D | 457 | 27.212 | 109.531 | 74.772 | 1.00 | 27.61 | C |
| ATOM | 15182 | CD1 | TRP | D | 457 | 28.480 | 109.207 | 74.367 | 1.00 | 26.17 | C |
| ATOM | 15184 | NE1 | TRP | D | 457 | 29.370 | 110.149 | 74.819 | 1.00 | 26.12 | N |
| ATOM | 15186 | CE2 | TRP | D | 457 | 28.690 | 111.112 | 75.522 | 1.00 | 25.26 | C |
| ATOM | 15187 | CD2 | TRP | D | 457 | 27.331 | 110.761 | 75.508 | 1.00 | 25.56 | C |
| ATOM | 15188 | CE3 | TRP | D | 457 | 26.423 | 111.596 | 76.165 | 1.00 | 24.92 | C |
| ATOM | 15190 | CZ3 | TRP | D | 457 | 26.886 | 112.724 | 76.788 | 1.00 | 24.01 | C |
| ATOM | 15192 | CH2 | TRP | D | 457 | 28.239 | 113.047 | 76.777 | 1.00 | 23.98 | C |
| ATOM | 15194 | CZ2 | TRP | D | 457 | 29.155 | 112.260 | 76.149 | 1.00 | 24.30 | C |
| ATOM | 15196 | C | TRP | D | 457 | 24.927 | 106.918 | 73.145 | 1.00 | 29.64 | C |
| ATOM | 15197 | O | TRP | D | 457 | 25.127 | 105.871 | 73.761 | 1.00 | 30.11 | O |
| ATOM | 15198 | N | ASP | D | 458 | 23.813 | 107.149 | 72.446 | 1.00 | 29.64 | N |
| ATOM | 15200 | CA | ASP | D | 458 | 22.871 | 106.067 | 72.163 | 1.00 | 30.00 | C |
| ATOM | 15202 | CB | ASP | D | 458 | 21.456 | 106.620 | 71.901 | 1.00 | 30.42 | C |
| ATOM | 15205 | CG | ASP | D | 458 | 20.787 | 107.227 | 73.163 | 1.00 | 31.26 | C |
| ATOM | 15206 | OD1 | ASP | D | 458 | 20.662 | 106.506 | 74.181 | 1.00 | 33.17 | O |
| ATOM | 15207 | OD2 | ASP | D | 458 | 20.323 | 108.401 | 73.214 | 1.00 | 30.31 | O |
| ATOM | 15208 | C | ASP | D | 458 | 23.405 | 105.243 | 70.956 | 1.00 | 29.75 | C |
| ATOM | 15209 | O | ASP | D | 458 | 22.662 | 104.510 | 70.272 | 1.00 | 29.41 | O |
| ATOM | 15210 | O13 | 444 | D | 500 | 29.783 | 116.760 | 81.248 | 1.00 | 43.28 | O |
| ATOM | 15211 | S12 | 444 | D | 500 | 30.864 | 116.387 | 82.132 | 1.00 | 42.59 | S |
| ATOM | 15212 | O14 | 444 | D | 500 | 32.224 | 116.769 | 81.817 | 1.00 | 43.05 | O |
| ATOM | 15213 | C01 | 444 | D | 500 | 30.406 | 117.217 | 83.634 | 1.00 | 44.92 | C |
| ATOM | 15214 | C02 | 444 | D | 500 | 31.432 | 117.604 | 84.565 | 1.00 | 46.73 | C |
| ATOM | 15216 | C03 | 444 | D | 500 | 31.074 | 118.247 | 85.767 | 1.00 | 47.36 | C |
| ATOM | 15218 | C04 | 444 | D | 500 | 29.711 | 118.493 | 86.031 | 1.00 | 47.70 | C |
| ATOM | 15220 | C05 | 444 | D | 500 | 28.700 | 118.103 | 85.104 | 1.00 | 47.53 | C |
| ATOM | 15222 | C06 | 444 | D | 500 | 29.037 | 117.452 | 83.895 | 1.00 | 45.98 | C |
| ATOM | 15224 | N15 | 444 | D | 500 | 30.896 | 114.676 | 82.479 | 1.00 | 34.04 | N |
| ATOM | 15225 | C16 | 444 | D | 500 | 31.497 | 114.289 | 83.828 | 1.00 | 31.09 | C |
| ATOM | 15228 | C19 | 444 | D | 500 | 32.388 | 113.140 | 83.555 | 1.00 | 29.66 | C |
| ATOM | 15229 | F22 | 444 | D | 500 | 31.626 | 112.067 | 83.351 | 1.00 | 30.77 | F |
| ATOM | 15230 | F21 | 444 | D | 500 | 33.170 | 112.908 | 84.610 | 1.00 | 29.72 | F |
| ATOM | 15231 | F20 | 444 | D | 500 | 33.122 | 113.297 | 82.452 | 1.00 | 28.12 | F |
| ATOM | 15232 | C23 | 444 | D | 500 | 29.617 | 114.039 | 82.203 | 1.00 | 28.86 | C |
| ATOM | 15233 | C24 | 444 | D | 500 | 29.431 | 113.536 | 80.912 | 1.00 | 27.15 | C |
| ATOM | 15235 | C25 | 444 | D | 500 | 28.198 | 112.945 | 80.565 | 1.00 | 25.98 | C |
| ATOM | 15237 | C28 | 444 | D | 500 | 28.554 | 113.983 | 83.165 | 1.00 | 26.98 | C |
| ATOM | 15239 | C27 | 444 | D | 500 | 27.328 | 113.383 | 82.828 | 1.00 | 25.42 | C |
| ATOM | 15241 | C26 | 444 | D | 500 | 27.118 | 112.846 | 81.517 | 1.00 | 24.42 | C |
| ATOM | 15242 | C33 | 444 | D | 500 | 25.792 | 112.183 | 81.029 | 1.00 | 22.86 | C |
| ATOM | 15243 | C34 | 444 | D | 500 | 25.234 | 111.097 | 81.997 | 1.00 | 20.31 | C |

| ATOM | 15244 | F36 444 D 500 | 24.196 110.407 81.435 1.00 15.54 | F |
|---|---|---|---|---|
| ATOM | 15245 | F37 444 D 500 | 26.246 110.287 82.370 1.00 20.02 | F |
| ATOM | 15246 | F35 444 D 500 | 24.792 111.597 83.166 1.00 20.09 | F |
| ATOM | 15247 | O42 444 D 500 | 25.988 111.622 79.680 1.00 24.12 | O |
| ATOM | 15249 | C38 444 D 500 | 24.688 113.270 80.950 1.00 22.86 | C |
| ATOM | 15250 | F39 444 D 500 | 24.402 113.916 82.114 1.00 21.70 | F |
| ATOM | 15251 | F40 444 D 500 | 25.139 114.271 80.152 1.00 23.02 | F |
| ATOM | 15252 | F41 444 D 500 | 23.522 112.780 80.476 1.00 21.85 | F |
| ATOM | 15253 | OH2 HOH X 1 | 46.532 92.966 60.943 1.00 34.51 | O |
| ATOM | 15256 | OH2 HOH X 2 | 43.940 86.741 60.458 1.00 21.54 | O |
| ATOM | 15259 | OH2 HOH X 3 | -8.517 37.033 50.353 1.00 32.34 | O |
| ATOM | 15262 | OH2 HOH X 4 | 32.880 22.773 46.224 1.00 35.84 | O |
| ATOM | 15265 | OH2 HOH X 5 | 14.230 40.833 44.521 1.00 26.16 | O |
| ATOM | 15268 | OH2 HOH X 6 | -4.506 33.429 56.969 1.00 22.66 | O |
| ATOM | 15271 | OH2 HOH X 7 | 1.182 33.211 51.836 1.00 25.14 | O |
| ATOM | 15274 | OH2 HOH X 8 | 42.367 92.308 87.001 1.00 31.51 | O |
| ATOM | 15277 | OH2 HOH X 9 | 10.330 38.054 50.008 1.00 29.19 | O |
| ATOM | 15280 | OH2 HOH X 10 | 11.484 48.043 48.250 1.00 27.34 | O |
| ATOM | 15283 | OH2 HOH X 11 | 61.225 114.890 67.101 1.00 38.72 | O |
| ATOM | 15286 | OH2 HOH X 12 | 41.090 104.749 75.930 1.00 39.93 | O |
| ATOM | 15289 | OH2 HOH X 13 | 43.103 95.687 80.489 1.00 29.34 | O |
| ATOM | 15292 | OH2 HOH X 14 | 39.300 107.966 69.692 1.00 30.35 | O |
| ATOM | 15295 | OH2 HOH X 15 | 7.458 49.068 50.128 1.00 28.92 | O |
| ATOM | 15298 | OH2 HOH X 16 | 10.240 45.008 40.909 1.00 32.15 | O |
| ATOM | 15301 | OH2 HOH X 17 | 2.836 16.569 62.303 1.00 34.89 | O |
| ATOM | 15304 | OH2 HOH X 18 | 20.897 45.121 29.759 1.00 36.12 | O |
| ATOM | 15307 | OH2 HOH X 20 | -24.434 20.835 48.248 1.00 41.60 | O |
| ATOM | 15310 | OH2 HOH X 21 | 33.739 89.574 78.961 1.00 33.24 | O |
| ATOM | 15313 | OH2 HOH X 22 | 40.099 90.209 61.705 1.00 31.52 | O |
| ATOM | 15316 | OH2 HOH X 23 | 55.511 82.920 79.410 1.00 42.28 | O |
| ATOM | 15319 | OH2 HOH X 24 | 23.880 31.530 42.241 1.00 31.86 | O |
| ATOM | 15322 | OH2 HOH X 25 | 8.960 44.376 48.177 1.00 35.40 | O |
| ATOM | 15325 | OH2 HOH X 26 | 36.847 88.047 82.041 1.00 29.20 | O |
| ATOM | 15328 | OH2 HOH X 27 | 5.113 40.886 61.707 1.00 37.26 | O |
| ATOM | 15331 | OH2 HOH X 28 | 16.518 33.981 29.281 1.00 33.23 | O |
| ATOM | 15334 | OH2 HOH X 29 | 6.099 60.077 49.223 1.00 48.04 | O |
| ATOM | 15337 | OH2 HOH X 30 | 61.699 85.208 92.702 1.00 22.47 | O |
| ATOM | 15340 | OH2 HOH X 31 | 30.566 91.470 70.226 1.00 43.75 | O |
| ATOM | 15343 | OH2 HOH X 32 | 40.885 82.761 59.479 1.00 35.50 | O |
| ATOM | 15346 | OH2 HOH X 33 | 19.677 39.489 29.060 1.00 26.50 | O |
| ATOM | 15349 | OH2 HOH X 34 | 12.819 44.208 34.109 1.00 39.68 | O |
| ATOM | 15352 | OH2 HOH X 35 | 32.930 39.602 48.595 1.00 42.39 | O |
| ATOM | 15355 | OH2 HOH X 36 | 23.749 36.540 35.504 1.00 25.43 | O |
| ATOM | 15358 | OH2 HOH X 37 | 24.708 25.459 46.968 1.00 33.72 | O |
| ATOM | 15361 | OH2 HOH X 38 | 49.099 77.477 91.071 1.00 40.02 | O |
| ATOM | 15364 | OH2 HOH X 39 | 33.753 105.012 66.983 1.00 42.25 | O |
| ATOM | 15367 | OH2 HOH X 40 | 7.607 41.675 44.947 1.00 33.21 | O |
| ATOM | 15370 | OH2 HOH X 41 | 5.145 27.301 63.404 1.00 34.78 | O |

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ATOM 15373 OH2 HOH X 42    16.656  43.571  31.693  1.00 39.41    O
ATOM 15376 OH2 HOH X 43    42.928 104.982  74.371  1.00 41.79    O
ATOM 15379 OH2 HOH X 44    57.847  85.188  90.141  1.00 33.55    O
ATOM 15382 OH2 HOH X 45    29.538  70.693  76.936  1.00 30.56    O
ATOM 15385 OH2 HOH X 46    12.599  46.276  27.929  1.00 49.86    O
ATOM 15388 OH2 HOH X 47    28.126  22.913  46.477  1.00 47.72    O
ATOM 15391 OH2 HOH X 48    11.129  33.667  46.692  1.00 49.46    O
ATOM 15394 OH2 HOH X 49   -11.613  23.589  62.844  1.00 54.23    O
ATOM 15397 OH2 HOH X 50    -1.060  49.229  56.547  1.00 46.16    O
ATOM 15400 OH2 HOH X 51    37.636  92.539  81.720  1.00 36.58    O
ATOM 15403 OH2 HOH X 52    27.519  41.154  40.197  1.00 35.37    O
ATOM 15406 OH2 HOH X 53    40.050  99.057  64.126  1.00 52.91    O
ATOM 15409 OH2 HOH X 54   -19.683  26.686  47.468  1.00 44.72    O
ATOM 15412 OH2 HOH X 55    50.246  84.320  94.984  1.00 34.24    O
ATOM 15415 OH2 HOH X 56    16.902  38.476  34.555  1.00 32.06    O
ATOM 15418 OH2 HOH X 57    38.060  67.355  68.317  1.00 41.43    O
ATOM 15421 OH2 HOH X 58    60.904  94.982  89.432  1.00 34.65    O
ATOM 15424 OH2 HOH X 59   -17.325  22.794  57.113  1.00 46.37    O
ATOM 15427 OH2 HOH X 60     3.362  13.072  65.124  1.00 38.40    O
ATOM 15430 OH2 HOH X 61    34.741 105.795  74.730  1.00 37.68    O
ATOM 15433 OH2 HOH X 62    36.894  71.754  79.474  1.00 32.98    O
ATOM 15436 OH2 HOH X 63    13.379  32.879  42.381  1.00 41.41    O
ATOM 15439 OH2 HOH X 64    46.404 124.169  78.443  1.00 35.68    O
ATOM 15442 OH2 HOH X 65    45.804  94.373  63.138  1.00 38.40    O
ATOM 15445 OH2 HOH X 66    51.421  95.969  67.069  1.00 43.00    O
ATOM 15448 OH2 HOH X 67    11.339  36.149  48.061  1.00 34.37    O
ATOM 15451 OH2 HOH X 68    34.894  90.045  94.991  1.00 51.93    O
ATOM 15454 OH2 HOH X 69    12.975  47.342  35.353  1.00 39.82    O
ATOM 15457 OH2 HOH X 70    63.059  87.658  92.928  1.00 42.47    O
ATOM 15460 OH2 HOH X 71    33.804  93.321  79.878  1.00 47.03    O
ATOM 15463 OH2 HOH X 72     2.417  31.051  61.473  1.00 41.02    O
ATOM 15466 OH2 HOH X 73    17.739  57.775  68.846  1.00 51.94    O
ATOM 15469 OH2 HOH X 74    25.040  39.514  30.274  1.00 35.46    O
ATOM 15472 OH2 HOH X 75     9.628  47.145  38.834  1.00 35.97    O
ATOM 15475 OH2 HOH X 76    -1.455  38.558  54.975  1.00 43.93    O
ATOM 15478 OH2 HOH X 77    23.890  32.054  65.767  1.00 40.56    O
ATOM 15481 OH2 HOH X 78    35.220  87.143  59.408  1.00 47.79    O
ATOM 15484 OH2 HOH X 79    -3.737  37.957  51.063  1.00 37.26    O
ATOM 15487 OH2 HOH X 80    26.390  20.517  51.266  1.00 41.78    O
ATOM 15490 OH2 HOH X 81    44.780  96.146  82.783  1.00 40.78    O
ATOM 15493 OH2 HOH X 82    61.022  96.896  91.425  1.00 47.39    O
ATOM 15496 OH2 HOH X 83    10.746  33.408  64.943  1.00 41.11    O
ATOM 15499 OH2 HOH X 84    42.068  92.559  99.125  1.00 40.71    O
ATOM 15502 OH2 HOH X 85    37.825  95.713  83.950  1.00 42.10    O
ATOM 15505 OH2 HOH X 86    18.527  38.924  32.746  1.00 31.46    O
ATOM 15508 OH2 HOH X 87    34.168  36.470  54.739  1.00 39.12    O
ATOM 15511 OH2 HOH X 88    19.596  48.522  72.373  1.00 46.37    O
ATOM 15514 OH2 HOH X 89    11.760  55.470  73.671  1.00 46.11    O
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| ATOM | 15517 | OH2 HOH X | 90 | 57.669 113.347 68.754 1.00 41.84 | O |
| ATOM | 15520 | OH2 HOH X | 91 | -6.478 40.654 47.625 1.00 35.45 | O |
| ATOM | 15523 | OH2 HOH X | 92 | 21.629 59.988 53.544 1.00 43.70 | O |
| ATOM | 15526 | OH2 HOH X | 93 | 46.330 74.545 84.817 1.00 51.22 | O |
| ATOM | 15529 | OH2 HOH X | 94 | -0.340 39.090 62.724 1.00 62.65 | O |
| ATOM | 15532 | OH2 HOH X | 95 | 62.907 120.631 75.543 1.00 59.06 | O |
| ATOM | 15535 | OH2 HOH X | 96 | 8.178 27.884 44.411 1.00 51.10 | O |
| ATOM | 15538 | OH2 HOH X | 97 | 27.884 88.496 62.492 1.00 40.76 | O |
| ATOM | 15541 | OH2 HOH X | 98 | -8.889 15.690 48.102 1.00 48.95 | O |
| ATOM | 15544 | OH2 HOH X | 99 | 9.002 52.589 72.903 1.00 50.58 | O |
| ATOM | 15547 | OH2 HOH X | 100 | 31.344 29.561 45.713 1.00 43.51 | O |
| ATOM | 15550 | OH2 HOH X | 101 | 18.153 37.397 64.337 1.00 54.94 | O |
| ATOM | 15553 | OH2 HOH X | 102 | 1.030 50.658 57.245 1.00 37.76 | O |
| ATOM | 15556 | OH2 HOH X | 103 | 29.712 106.432 76.942 1.00 40.89 | O |
| ATOM | 15559 | OH2 HOH X | 104 | 22.984 38.071 63.390 1.00 42.03 | O |
| ATOM | 15562 | OH2 HOH X | 105 | 51.193 79.769 95.149 1.00 45.76 | O |
| ATOM | 15565 | OH2 HOH X | 106 | 33.792 91.621 90.143 1.00 51.13 | O |
| ATOM | 15568 | OH2 HOH X | 107 | 36.239 92.488 88.867 1.00 39.52 | O |
| ATOM | 15571 | OH2 HOH X | 108 | -3.601 13.130 44.654 1.00 54.47 | O |
| ATOM | 15574 | OH2 HOH X | 109 | 49.245 108.437 58.969 1.00 35.43 | O |
| ATOM | 15577 | OH2 HOH X | 110 | -18.430 23.420 50.306 1.00 39.52 | O |
| ATOM | 15580 | OH2 HOH X | 111 | -18.855 46.772 46.188 1.00 58.56 | O |
| ATOM | 15583 | OH2 HOH X | 112 | 45.326 103.771 72.690 1.00 36.87 | O |
| ATOM | 15586 | OH2 HOH X | 113 | 60.490 82.135 95.444 1.00 35.66 | O |
| ATOM | 15589 | OH2 HOH X | 114 | 53.497 88.269 70.140 1.00 50.29 | O |
| ATOM | 15592 | OH2 HOH X | 115 | 32.011 109.362 74.027 1.00 41.73 | O |
| ATOM | 15595 | OH2 HOH X | 116 | 0.426 9.190 66.809 1.00 41.95 | O |
| ATOM | 15598 | OH2 HOH X | 117 | 36.454 102.339 72.138 1.00 40.05 | O |
| ATOM | 15601 | OH2 HOH X | 118 | -3.746 7.119 61.813 1.00 47.41 | O |
| ATOM | 15604 | OH2 HOH X | 119 | 16.245 39.647 65.869 1.00 39.33 | O |
| ATOM | 15607 | OH2 HOH X | 120 | -15.201 15.272 45.138 1.00 47.46 | O |
| ATOM | 15610 | OH2 HOH X | 121 | 56.346 83.142 90.536 1.00 36.23 | O |
| ATOM | 15613 | OH2 HOH X | 122 | 12.750 37.842 70.610 1.00 45.55 | O |
| ATOM | 15616 | OH2 HOH X | 123 | 8.747 37.163 32.384 1.00 40.95 | O |
| ATOM | 15619 | OH2 HOH X | 124 | 61.006 109.762 72.425 1.00 57.76 | O |
| ATOM | 15622 | OH2 HOH X | 125 | 46.773 121.479 78.212 1.00 40.44 | O |
| ATOM | 15625 | OH2 HOH X | 126 | 46.357 103.993 67.888 1.00 42.09 | O |
| ATOM | 15628 | OH2 HOH X | 127 | 25.492 45.676 35.124 1.00 55.50 | O |
| ATOM | 15631 | OH2 HOH X | 128 | -0.796 46.044 59.885 1.00 44.16 | O |
| ATOM | 15634 | OH2 HOH X | 129 | 3.729 30.062 68.882 1.00 43.81 | O |
| ATOM | 15637 | OH2 HOH X | 130 | 48.573 84.962 56.210 1.00 43.53 | O |
| ATOM | 15640 | OH2 HOH X | 131 | -6.600 39.522 57.877 1.00 52.66 | O |
| ATOM | 15643 | OH2 HOH X | 132 | -23.390 27.562 46.202 1.00 46.29 | O |
| ATOM | 15646 | OH2 HOH X | 133 | 36.470 27.644 53.311 1.00 50.64 | O |
| ATOM | 15649 | OH2 HOH X | 134 | 16.019 63.275 53.172 1.00 58.47 | O |
| ATOM | 15652 | OH2 HOH X | 135 | -24.310 23.846 44.067 1.00 45.15 | O |
| ATOM | 15655 | OH2 HOH X | 136 | 10.555 49.737 71.777 1.00 52.75 | O |
| ATOM | 15658 | OH2 HOH X | 137 | 26.101 85.589 68.136 1.00 54.10 | O |

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ATOM 15661 OH2 HOH X 138    23.425 48.004 36.029 1.00 60.82        O
ATOM 15664 OH2 HOH X 139    13.175 50.753 30.871 1.00 50.31        O
ATOM 15667 OH2 HOH X 140     4.424 42.442 47.614 1.00 50.61        O
ATOM 15670 OH2 HOH X 141    21.786 39.941 30.408 1.00 41.84        O
ATOM 15673 OH2 HOH X 142    46.374 98.519 84.033 1.00 49.67        O
ATOM 15676 OH2 HOH X 143    30.667 21.882 56.816 1.00 51.78        O
ATOM 15679 OH2 HOH X 144     6.883 17.302 67.157 1.00 44.68        O
ATOM 15682 OH2 HOH X 145    -8.666 40.701 52.911 1.00 55.03        O
ATOM 15685 OH2 HOH X 146    46.777 99.081 89.567 1.00 38.00        O
ATOM 15688 OH2 HOH X 147    44.860 79.405 78.864 1.00 44.03        O
ATOM 15691 OH2 HOH X 148    -1.046 34.042 71.130 1.00 50.39        O
ATOM 15694 OH2 HOH X 149    50.211 98.627 71.049 1.00 52.24        O
ATOM 15697 OH2 HOH X 150    59.387 81.812 97.546 1.00 37.06        O
ATOM 15700 OH2 HOH X 151    35.147 89.645 81.199 1.00 34.78        O
ATOM 15703 OH2 HOH X 152     8.708 46.589 42.720 1.00 39.52        O
ATOM 15706 OH2 HOH X 153    11.645 48.307 37.723 1.00 27.22        O
ATOM 15709 OH2 HOH X 154     8.993 47.914 47.811 1.00 33.15        O
ATOM 15712 OH2 HOH X 155    10.193 45.169 71.150 1.00 54.72        O
ATOM 15715 OH2 HOH X 156    65.460 87.643 94.825 1.00 44.03        O
ATOM 15718 OH2 HOH X 157    -7.012 39.371 50.073 1.00 32.06        O
ATOM 15721 OH2 HOH X 158    31.654 106.977 74.549 1.00 33.49       O
ATOM 15724 OH2 HOH X 159    21.167 41.889 71.647 1.00 46.47        O
ATOM 15727 OH2 HOH X 160   -25.714 18.816 48.564 1.00 49.63        O
ATOM 15730 OH2 HOH X 161    33.611 28.996 44.403 1.00 53.51        O
ATOM 15733 OH2 HOH X 162    59.252 85.715 92.605 1.00 38.66        O
ATOM 15736 OH2 HOH X 163    56.509 79.788 79.546 1.00 51.27        O
ATOM 15739 OH2 HOH X 164    61.945 84.384 95.225 1.00 37.20        O
ATOM 15742 OH2 HOH X 165    21.292 39.470 65.165 1.00 43.24        O
ATOM 15745 OH2 HOH X 166    15.971 40.815 31.178 1.00 40.20        O
ATOM 15748 OH2 HOH X 167    38.973 28.814 53.562 1.00 54.48        O
ATOM 15751 OH2 HOH X 168     6.544 11.603 61.259 1.00 53.05        O
ATOM 15754 OH2 HOH X 169   -24.303 26.808 42.736 1.00 61.79        O
ATOM 15757 OH2 HOH X 170    34.981 69.780 79.701 1.00 40.54        O
ATOM 15760 OH2 HOH X 171    51.901 104.303 67.464 1.00 47.59       O
ATOM 15763 OH2 HOH X 172    18.091 45.617 30.308 1.00 51.39        O
ATOM 15766 OH2 HOH X 173    34.412 92.254 86.597 1.00 48.91        O
ATOM 15769 OH2 HOH X 174    41.936 82.641 55.668 1.00 38.37        O
ATOM 15772 OH2 HOH X 175    22.163 36.653 32.630 1.00 42.62        O
ATOM 15775 OH2 HOH X 176    28.413 34.741 46.994 1.00 50.06        O
ATOM 15778 OH2 HOH X 177     8.522 49.608 45.435 1.00 46.69        O
ATOM 15781 OH2 HOH X 178    20.863 62.029 52.043 1.00 50.34        O
ATOM 15784 OH2 HOH X 179     4.382 46.594 47.704 1.00 41.40        O
ATOM 15787 OH2 HOH X 180    20.936 27.200 39.092 1.00 46.32        O
ATOM 15790 OH2 HOH X 181    -5.954 7.428 61.983 1.00 46.68         O
ATOM 15793 OH2 HOH X 182    51.690 126.628 74.732 1.00 52.23       O
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